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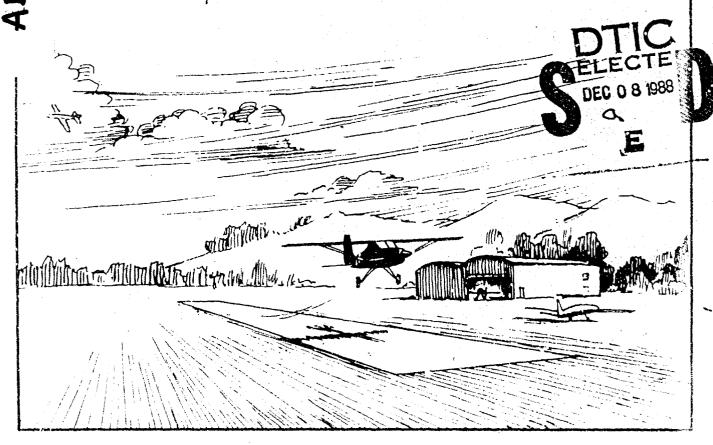
U.S. Department of Transportation

Federal Aviation Administration

General Aviation Activity and Avionics Survey

AD-A201 760

Annual Summary Report 1987 Data



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November 1988

Office of Management Systems Management Standards and Statistics Division

042

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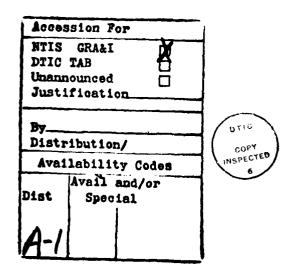
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PREFACE

This report presents the results of the 1987 General Aviation Activity and Avionics Survey. The survey is the continuation of an FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Management Standards and Statistics Division sponsored and coordinated the activities associated with the survey. The Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, and with contract support from the Systems Development Corporation, developed the sample design and computer system for sample selection, data editing and estimation of results, ran the system during survey production, analyzed survey results, and prepared the survey report. DYNATREND, Incorporated produced the camera-ready copy of this report.

Individual contributions to this survey include: Hubert E. LaCroix, Nicholas Soldo and Shung-Chai Huang, AMS-420, who sponsored the project; Michael Rossetti, TSC, who managed the project; Randhir Chhatwal and Jiwan Seth of Unisys Corporation, who revised the computer programs for the 1987 survey and performed the production runs to produce the estimates contained in this report; and James Kelley of DYNATREND, Incorporated, who provided editorial support.



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EXECUTIVE SUMMARY

This report presents the results of the eleventh General Aviation Activity and Avionics Survey, conducted in 1988 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1987 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 11.1 percent of the registered general aviation fleet to be included in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, yielding in total a response rate of 61.1 percent.

Some important survey findings appear below:

- An estimated 33.4 million hours of flying time were logged by the 217,183 active general aviation aircraft in the U.S. fleet during 1987. The active aircraft had a mean flight time per aircraft of 148.4 hours and represented about 81.2 percent of the registered general aviation fleet. These statistics portray an overall decrease in general aviation activity from 1986 to 1987, with total hours decreasing 2.8 percent and number of active aircraft falling 1.3 percent.
- Turboprop and rotorcraft aircraft averaged a greater number of flight hours per aircraft than other aircraft types with 389 hours and 359 hours, respectively. Twin engine turboprops with 13 or more seats flew about 652 hours per aircraft. In contrast, single engine piston powered aircraft with fewer than four seats averaged approximately 126 hours.
- An estimated 93.7 million operations (takeoffs and landings) were performed by the active aircraft. About 63 percent were in local flight and 37 percent in cross-country flight.
- The most common primary use of general aviation aircraft was personal for an estimated 57 percent of the active fleet, followed by business for 18 percent of the fleet, instructional for 7 percent of the fleet, and executive for 6 percent of the fleet.
- The most populous region in terms of active aircraft was the Great Lakes Region, which housed an estimated 18 percent of all active general aviation aircraft, followed closely by the Western-Pacific Region with 17 percent. The most populous state was California, which housed 14 percent of the registered aircraft.
- About 85 percent of the general aviation aircraft had two-way VHF communication equipment, about 67 percent were equipped with 4096-code transponders, about 55 percent had at least one component of an instrument landing system, and about 80 percent had some form of navigation equipment. About 39 percent had automated guidance and control equipment, such as a flight director or autopilot.

- An estimated 28.8 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 59.1 percent of the general aviation fleet could not fly above 12,500 feet due to avionics limitations alone.
- An estimated 41 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1987.
- About 77 percent of the total hours logged by the 1987 general aviation fleet were flown in visual meteorological (VM) conditions during the day. Aircraft flown in VM night, instrument meteorological (IM) day, and IM night conditions accounted for 9 percent, 8 percent, and 3 percent of the total hours flown, respectively.
- The general aviation aircraft fleet consumed an estimated 1,074 million gallons of fuel during 1987: 402 million gallons of aviation gasoline and 672 million gallons of jet fuel.
- The general aviation aircraft fleet flew an estimated 4,071 million air miles during 1987.

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1. INTRODUCTION

1.1 GENERAL

1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1987, general aviation composed over 98 percent of the U.S. civil air fleet¹, accounted for nearly 88 percent of civil operations at U.S. airports², and logged almost 75 percent of the total hours flown by the U.S. civil air fleet³. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S., served two purposes: (1) Part 1

Air Carrier: Census of U.S. Civil Aircraft: Calendar Year 1987, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1987), Tables 2.2 and 2.6.

Note: Air carrier and aircraft operations as used in this publication are calculated by subtracting Air Taxi, Commuter, and Air Travel Clubs aircraft and operations from the All Carriers figure in Tables 2.1 and 2.6 of the <u>Census</u>.

General Aviation: Table 2-6.

²Air Carrier: <u>FAA Air Traffic Activity, Fiscal Year 1987</u>, Federal Aviation Administration, (Washington, DC, 1987), Table 1B.

General Aviation: Table 2-36.

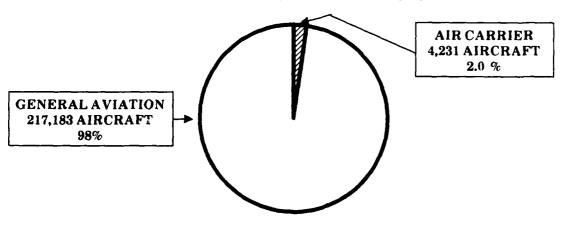
Note: General aviation as used in the survey combines both general aviation and air taxi from Table 1B of Air Traffic Activity.

³Air Carrier: <u>Census of U.S. Civil Aircraft: Calendar Year 1987</u>, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1987), Table 2.6.

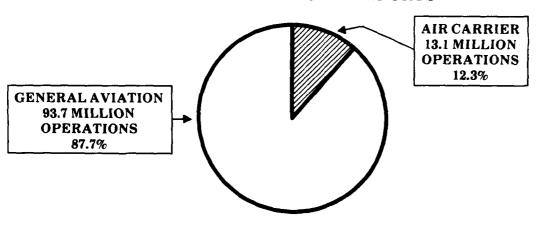
Note: Air carrier hours as used in this publication are calculated by subtracting hours for Air Taxi, Commuters, and Air Travel Clubs from Air Carrier hours in Table 2.6 of the <u>Census</u>.

General Aviation: Table 2-4.

ACTIVE U.S. CIVIL AIR FLEET



OPERATIONS AT U.S. AIRPORTS



FLYING TIME

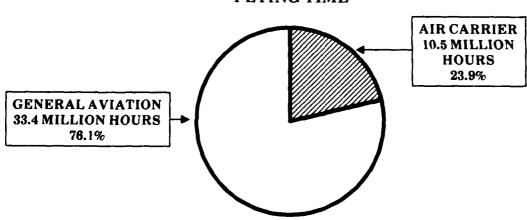


FIGURE 1.1. A COMPARISON OF GENERAL AVIATION AND AIR CARRIER ACTIVITY IN 1987

was the mandatory aircraft registration renewal form, (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.4.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1987 statistics in this report were derived from the eleventh survey, which took place in 1988. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government.

1.2 SURVEY COVERAGE

1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations (FAR) Parts 121 and 127. FAR Part 121, as modified by Special Federal Aviation Regulation 38 (SFAR-38), governs air carriers carrying passengers and cargo for hire and conducting scheduled and charter operations with aircraft having a seating capacity of more than 30 seats and/or a payload capacity of more than 7,500 pounds. General aviation thus includes aircraft operated under:

- Part 91: General operating and flight rules.
- Part 125: Certification and operations: Airplanes having a seating capacity of 20 or more passengers or a maximum payload capacity of 6,000 pounds or more.
- Part 133: Rotorcraft external-load operations.
- Part 135: Air taxi operators and commercial operators.
- Part 137: Agricultural aircraft operations.

The term "general aviation" is not always defined in the same way from aviation publication to aviation publication, and thus is often a source of confusion to users of general aviation statistics. The point on which the various definitions disagree is under what categorization - air carrier or general aviation - air taxis and commuter air carriers operating under FAR Part 135, and air travel clubs operating under FAR part 125 should be included. The General Aviation Activity and Avionics Survey has always used the above definition for general aviation, which includes the air taxis, commuter air carriers and air travel clubs. Thus, it is essential for the user to understand thoroughly the definition of general aviation as it applies to the sources he is using so that proper comparisons of data can be made.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

1.2.2 Geographic

The sample survey conducted by the FAA covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1987. Over 99 percent of these aircraft are registered to owners living in the 50 states; Washington, D.C.; Puerto Rico; and other U.S. territories. About 0.1 percent of aircraft registered to owners living in foreign countries were excluded from the survey.

1.2.3 Content

Appendix A.4 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide the following information on the sampled aircraft's characteristics and uses for various periods:

- 1) Hours by use, IFR hours, percentage of hours flown in Instrument Meteorological (IM) and Visual Meteorological (VM) conditions during the day and evening, fuel consumption grade and cost, and number of local and cross-country landings for entire calendar year 1987,
- 2) Airframe hour reading and location of aircraft base as of December 31, 1987, and
- 3) Avionics equipment currently on board.

1.3 SURVEY METHOD

The method of collecting data used by the FAA for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in three mailings. The first mailing in March 1988, covered all 29,719 aircraft in the sample and had a response rate of 42.1 percent as shown in Table 1-1. This was about 68.9 percent of the total responses to the survey. The second mailing conducted in April 1988, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 25.3 percent which accounted for 23.1 percent of the total responses to the survey. The third mailing was conducted in May 1988, and included only those aircraft in the sample that had not responded to the first or second mailings. The third mailing had a response rate of 13.9 percent, or 7.9 percent of the total responses to the survey. The combined response rate for the three mailings was 61.1 percent.

Source: FAA Aircraft Registration Master File as of December 31, 1987.

TABLE 1-1. SUMMARY OF RESPONSE INFORMATION BY SURVEY PHASE

SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE (R/(TOTAL R) X 100%)
FIRST MAILING	29,719	12,514	42.1%	68.9%
SECOND MAILING	16,582	4,202	25.3%	23.1%
THIRD MAILING	10,294	1,436	13.9%	7.9%
TOTAL	29,719	18,152	61.1%	100%

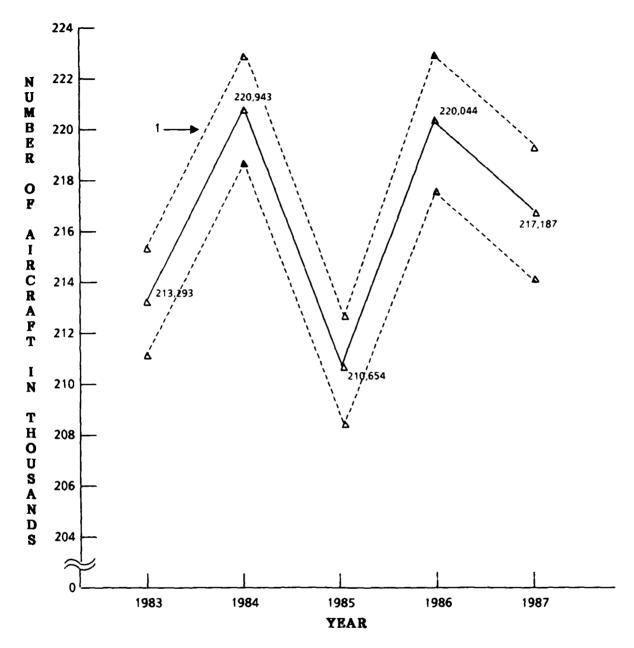
1.4 SUMMARY OF SURVEY RESULTS

1.4.1 National Scene

Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1987 an estimated 33.4 million hours of flying time were logged by the 217,183 active general aviation aircraft in the U.S. fleet. The mean annual flight time per aircraft was 148.4 hours. These aircraft comprised 81.2 percent of the registered general aviation fleet. The statistics for 1987 showed a 2.8 percent decrease in flying hours, a 1.3 percent decrease in the number of active aircraft in the general aviation fleet, and a 0.4 percent decrease in mean hours per aircraft over the comparable figures for 1986. Longer-term trends for these variables are found in Figures 1.2, 1.3, and 1.4. They reflect a slight downward trend in general aviation activity in recent years.

While results discussed above indicate certain trends in the number of active aircraft, the activity of the general aviation fleet (total hours flown) and the average hours flown per active aircraft, year to year changes may not be statistically significant. An examination of the standard errors and confidence intervals for the chosen level of confidence is needed to determine statistical significance (change not due to sampling variances). Figures 1.2, 1.3, and 1.4 show the confidence intervals of estimates over several years at the 95 percent level of confidence (± two standard errors).

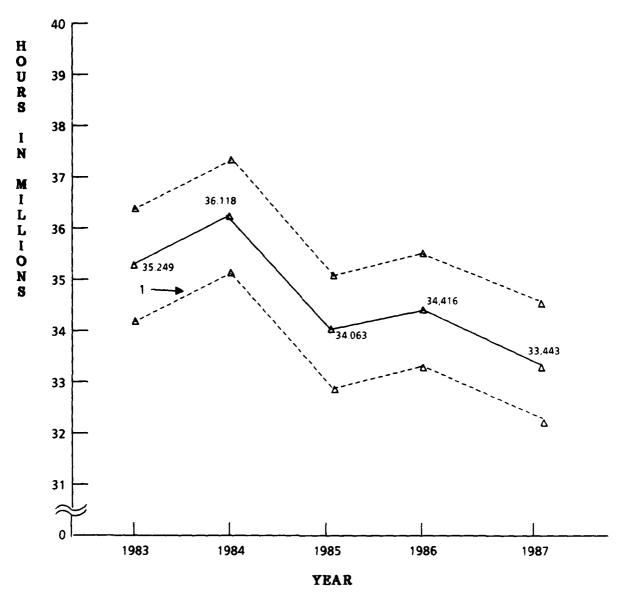
¹ Note: The 61.1 percent response rate in Table 1-1 does not include the nearly 13 percent of post office returns received in 1988. If the post office returns had remained at their historical rates of around 6 percent, the total response rate could be expected to exceed 68 percent.



SOURCE: TABLE 1-3

1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1983-1987 TRUE VALUES. SEE APPENDIX B.

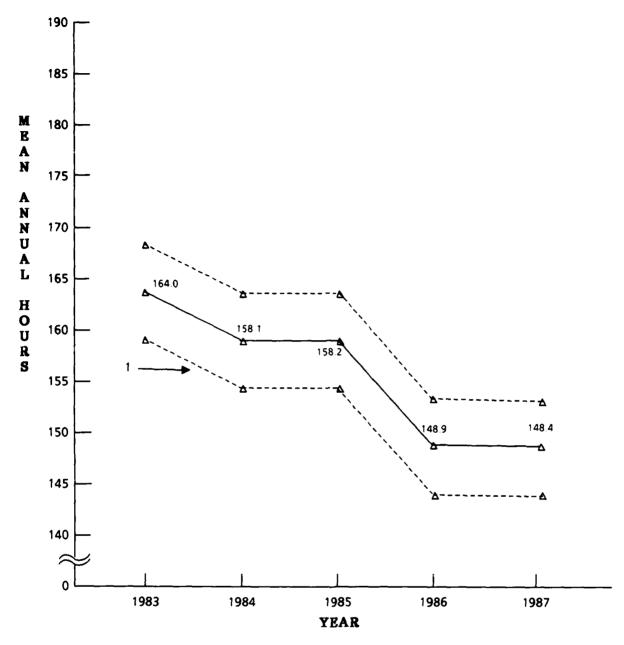
FIGURE 1.2. GENERAL AVIATION ACTIVE FLEET SIZE, 1983 - 1987



SOURCE: TABLE 2-1

1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1983-1987 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.3. GENERAL AVIATION TOTAL FLYING TIME, 1983 - 1987



SOURCE: TABLE 2-1

1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1983 \cdot 1987 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT, 1983 - 1987

1.4.2 Results by Aircraft Type

The most heavily used aircraft types were fixed wing turboprops with 13 or more seats, averaging over 651 hours per aircraft, because of their heavy commercial usage as commuter air carriers and air taxis. There was a great deal of variation in activity among all types of general aviation aircraft in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

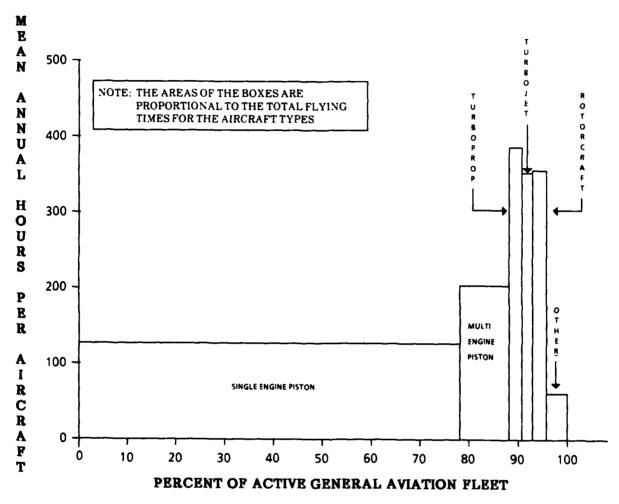
Five-year trends from 1982 to 1987 for total flight time and number of active aircraft are shown by aircraft type in Tables 1-2 and 1-3. Even though the number of active aircraft has exhibited little growth over the period, the trend for total flight time is downward at an annual rate of 1.71 percent. Closer examination of the tables reveals that lower usage of fixed-wing piston engine aircraft is largely responsible for the decline in hours. In contrast, twin engine turbojets have grown in both numbers and usage. In the rotorcraft area, piston-powered rotorcraft have risen in number and hours flown, while turbine-powered rotorcraft have declined in number from 1982 to 1987. These results are displayed in more detail in Tables 2-1 and 2-6.

The general aviation aircraft fleet flew an estimated 4.071 billion miles over the land during 1987. The estimate is based on a mathematical model, incorporating speed differentials by phase of flight, cruising speed by manufacturer/model group of aircraft, and the number of hours flown by manufacturer/model group. Detailed estimates by aircraft type and primary use can be found in Table 2-24.

It is estimated that general aviation aircraft made approximately 46.9 million landings during 1987. Figure 1.6 shows the landings by aircraft type and type of flight (local or cross-country). It can be seen that single engine piston aircraft perform the majority of landings, and that most of the landings are in local rather than cross-country flight. It apears that rotorcraft also engage primarily in local flights. However, turboprops and turbojets, as might be expected, are used primarily for longer, cross-country flying. These results, broken down additionally by FAA region, can be found in Tables 2-36 through 2-38.

1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.7. Distance along the vertical axis indicates mean hours per aircraft. Distance along the horizontal axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to the total flying time for each primary use. Aircraft used as commuter air carriers showed the highest individual usage with a mean of 1,340 hours flown per aircraft. Aircraft used as air taxis and for instructional purposes also had fairly high levels of individual usage with mean hours flown per aircraft



SOURCE: TABLE 2-1

FIGURE 1.5. 1987 GENERAL AVIATION ACTIVITY BY AIRCRAFT TYPE

TABLE 1-2. GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE, 1982 - 1987 (Thousands of Hours)

AIRCRAFT TYPE	1982 (Standard Error)	1983 (Standard Error)	19854 (Standard Error)	1985 (Standard Error)	1986 (Standard Error)	1987 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1 - 3 seats	8,325 (374)	8,189 (399)	8,586 (3 2 7)	7,921 (290)	7,826 (291)	8,545 (323)	0.52
1-engine piston 4+ seats	15,934 (472)	14,959 (441)	14,919 (358)	14,931 (376)	14,112 (353)	13,596 (312)	-3.12
2-engine piston 1-6 seats	3,040 (177)	3,013 (192)	2,984 (114)	2,725 (143)	2,798 (161)	2,635 (150)	-2.82
2-engine piston 7+ seats	2,617 (197)	2,717 (235)	2,600 (165)	2,190 (141)	2,113 (156)	2,248 (202)	-2.99
Other piston	33 (10)	32 (10)	102 (30)	26 (9)	11 (5)	15 (5)	-14.59
2-engine turboprop 1 - 12 seats	1,576 (116)	1,431 (93)	1,715 (88)	1,465 (76)	1,648 (84)	1,483 (78)	-1.21
2-engine turboprop 13+ seats	520 (84)	659 (118)	736 (75)	551 (58)	1,149 (122)	511 (61)	-0.35
Other turboprop	71 (20)	83 (31)	54 (13)	64 (7)	85 (12)	183 (45)	20.85
2-engine turbojet	1,347 (98)	1,350 (92)	1,328 (66)	1,461 (70)	1,566 (76)	1,421 (59)	1.08
Other turbojet	264 (46)	124 (31)	237 (32)	161 (17)	88 (19)	107 (11)	-16.53
ROTORCRAFT]						
Piston	579 (58)	572 (49)	591 (66)	564 (85)	804 (103)	652 (60)	2.40
Turbine	1,771 (145)	1,700 (151)	1,903 (120)	1,590 (142)	1,820 (141)	1,631 (157)	-1.63
OTHER	379 (40)	420 (49)	358 (23)	414 (34)	394 (30)	416 (25)	1.88
TOTAL AIRCRAFT	36,456 (701)	35,249 (712)	36,118 (561)	34,063 (556)	34,416 (565)	33,443 (556)	-1.71

NOTE: Column summations may differ from printed totals due to estimation procedures.

TABLE 1-3. GROWTH OF ACTIVE GENERAL AVIATION FLEET BY AIRCRAFT TYPE, 1982 - 1987 (Number of Aircraft)

AIRCRAFT TYPE	1982 (Standard Error)	1983 (Standard Error)	1984 (Standard Error)	1985 (Standard Error)	1986 (Standard Error)	1987 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING							
1-engine piston 1 - 3 seats	57,670 (910)	59,199 (976)	61,989 (724)	58,829 (809)	62,427 (807)	63,533 (754)	1.96
1-engine piston 4+ seats	106,503 (687)	107,228 (778)	109,933 (603)	105,555 (732)	109,351 (650)	107,502 (673)	0.19
2-engine piston 1-6 seats	16,381 (303)	16,249 (315)	16,539 (231)	15,627 (300)	16,166 (293)	15,741 (260)	-0.79
2-engine piston 7+ seats	8,501 (168)	8,660 (150)	8,719 (193)	8,032 (180)	7,555 (228)	7,566 (155)	-2.30
Other piston	140 (24)	143 (14)	262 (35)	148 (31)	148 (36)	112 (28)	-4.36
2-engine turboprop 1 - 12 seats	4,427 (45)	4,733 (72)	4,992 (47)	4,633 (103)	4,809 (97)	4,337 (92)	-0.41
2-engine turboprop 13 + seats	610 (28)	578 (48)	640 (29)	607 (39)	970 (56)	723 (31)	3.46
Other turboprop	149 (28)	142 (38)	176 (15)	167 (13)	185 (30)	214 (19)	7.51
2-engine turbojet	3,309 (84)	3,447 (92)	3,780 (50)	3,914 (67)	4,037 (64)	3,900 (63)	3.34
Other turbojet	687 (73)	451 (91)	540 (45)	460 (33)	444 (72)	458 (22)	-8.61
ROTORCRAFT				}			
Piston	2,419 (178)	2,541 (191)	2,936 (185)	2,877 (201)	2,921 (175)	2,813 (140)	3.06
Turbine	3,749 (140)	3,998 (153)	4,160 (115)	3,541 (159)	4,022 (126)	3,520 (147)	-1.25
OTHER	5,233 (211)	5,923 (207)	6,275 (172)	6,263 (207)	7,010 (211)	6,783 (228)	5.33
TOTAL AIRCRAFT	209,779	213,293	220,943	210,654	220,044	217,183	0.70
	(1,238)	(1,345)	(1,032)	(1,200)	(1,152)	(1,105)	

NOTE: Column summations may differ from printed totals due to estimation procedures.

NUMBER OF LANDINGS (100 THOUSANDS) 10 20 30 40 50 60 70 80 90 100 110 120 130 140 138.4 FIXED WING PISTON 1 ENGINE, 1-3 SEATS 105.1 FIXED WING PISTON 1 ENGINE, 4 + SEATS 7.7 FIXED WING PISTON 2 ENGINES, 1-6 SEATS FIXED WING PISTON 2 ENGINES, 7 + SEATS 0.02 FIXED WING PISTON OTHER 0.1 I R 1.2 FIXED WING TURBOPROP C 142 2 ENGINES, 1-12 SEATS R A 1.3 FIXED WING TURBOPROP F 5.0 LOCAL FLIGHT 2 ENGINES, 13 + SEATS Т **CROSS-COUNTRY FLIGHT** FIXED WING TURBOPROP 28 T OTHER 0.4 Y P FIXED WING TURBOJET E 2 ENGINES 106 FIXED WING TURBOJET 0.1 OTHER 0.5 137 **ROTORCRAFT PISTON**

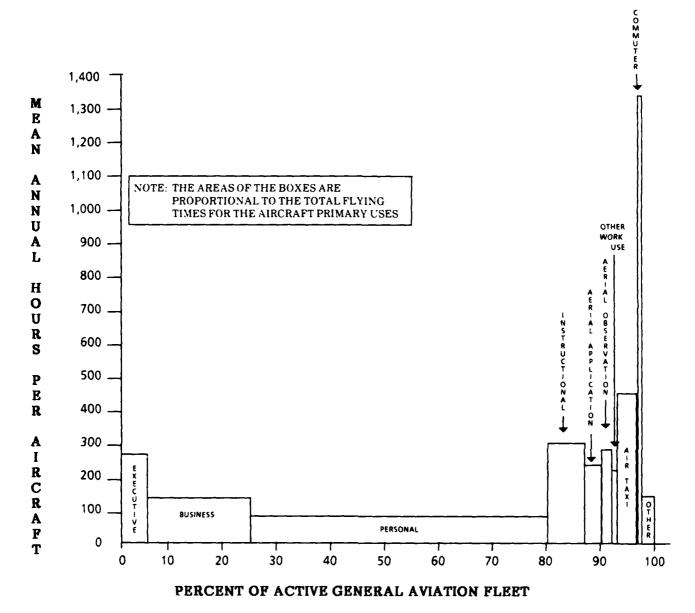
FIGURE 1.6. 1987 GENERAL AVIATION NUMBER OF LANDINGS BY AIRCRAFT TYPE

ROTORCRAFT TURBINE

OTHER AIRCRAFT

74

0 6



SOURCE: TABLES 2-4 AND 2-9

FIGURE 1.7. 1987 GENERAL AVIATION ACTIVITY BY PRIMARY USE

of 462 and 312, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 57 and 18 percent of the active fleet.

1.4.4 Results by Flying Conditions

Survey results indicate that about 77 percent of the total hours logged by the 1987 general aviation fleet were flown in Visual Meteorological (VM) conditions during the day. Aircraft flown in VM night, Instrument Meteorological (IM) day, and IM night conditions accounted for 9 percent, 8 percent, and 3 percent of the total hours flown, respectively. These results are illustrated in Figure 1.8.

Not surprisingly, fixed wing single engine piston aircraft and rotorcraft spend the bulk of their flying time in VM conditions. Single engine piston aircraft fly 94 percent of their flight hours in VM conditions. Fixed wing piston aircraft with two engines, turboprops, and turbojets spend a considerable amount of their flying time in IM conditions, approximately 24, 35, and 41 percent, respectively. Table 2-12 contains more data on general aviation annual hours flown by weather and light conditions by aircraft type. In addition, Tables 2-13 and 2-14 give detailed breakdowns of general aviation annual hours flown by weather and light conditions by region of based aircraft and by SDR manufacturer/model group, respectively.

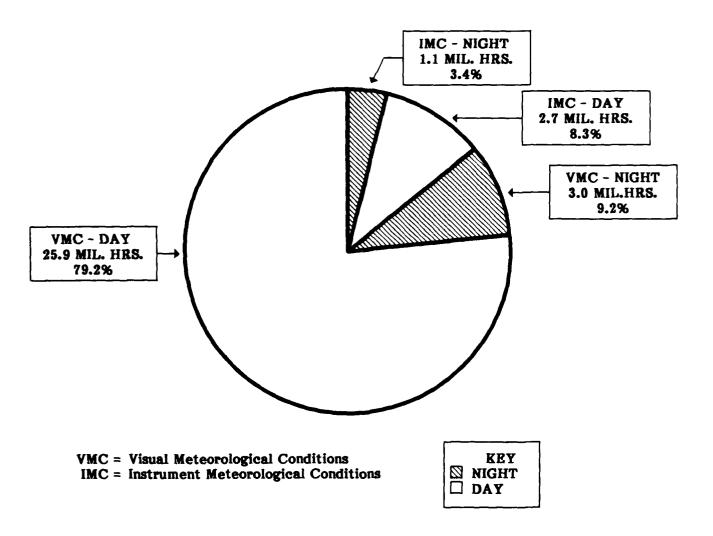
1.4.5 Results by FAA Region

Although the total active aircraft and flight time decreased slightly in 1987, the mean aircraft usage showed some increases for particular regions from 1986 to 1987. Compared to 1986, the Southern region increased 18 percent, and the Great Lakes rose by 3 percent. In contrast, the Eastern region dropped by 18 percent. In Figure 1.9, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes accounted for more active aircraft than any other region. The Southern and Western-Pacific Regions accounted for the most total flight time. The smallest region in continental United States was New England, with only 4.2 percent of the active aircraft and 3.7 percent of the fleet's total flight time.

Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of based aircraft.

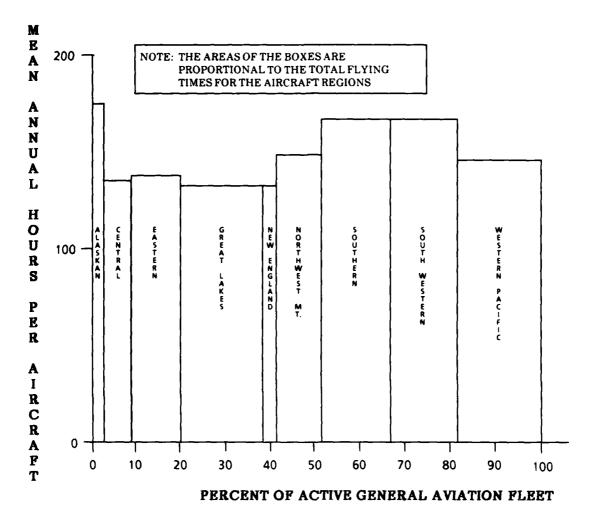
1.4.6 Results by Avionics Capability

1.4.6.1 Individual Avionics Components - The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.10. Eighty-five percent of the aircraft have two-way VHF communications, 68 percent are equipped with 4096-code transponders, 55 percent have at least one component of an instrument landing system, and 80 percent have some form of navigation equipment. It is evident from comparing the 1987 and 1981 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. In terms of transponder equipment, there was a substantial increase in the percentage of the general aviation aircraft containing 4096 code transponders and altitude encoding equipment, while the



SOURCE: TABLE 2-12

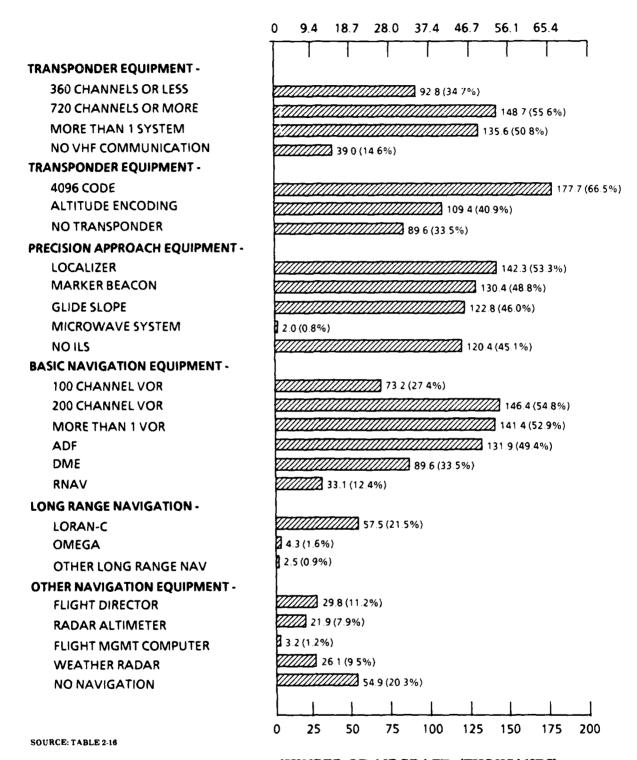
FIGURE 1.8. 1987 GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS



SOURCE: TABLE 2-3

FIGURE 1.9. 1987 GENERAL AVIATION ACTIVITY BY FAA REGION

PERCENT OF GENERAL AVIATION FLEET



NUMBER OF AIRCRAFT (THOUSANDS)

FIGURE 1.10. AVIONICS EQUIPMENT IN THE 1987 GENERAL AVIATION AIRCRAFT FLEET

percentage of aircraft containing no transponder equipment declined considerably over the 6 year period. The proportion of the general aviation fleet with transponders increased from 62 percent in 1981 to 67 percent in 1987. The proportion of aircraft having two or more communications systems increased by about 2 percent from 1981 to 1987. The proportion with two or more VOR receivers also increased by about 2 percent over the same 6 year period, while the proportion having long range navigation equipment rose by more than 20 percent, most of it from LORAN receivers.

Guidance and Control Equipment encompasses flight directors, horizontal situation indicators (HSI), electronic flight information systems (EFIS), flight management computers, and autopilots. These types of equipment represent the more sophisticated as well as more expensive avionics equipment available to the general aviation aircraft fleet. Thus, only around 39 percent of general aviation aircraft have installed one or more of these types of avionics. More detailed breakdowns of avionics equipment by aircraft type, state, region, and primary use are provided in Tables 2-15 through 2-18.

Figure 1.11 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1987 and further, the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1987 and were equipped with transponders. Although a much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, almost all that did were equipped with transponders. In fact, almost 100 percent of IFR flying was performed by aircraft equipped with transponders.

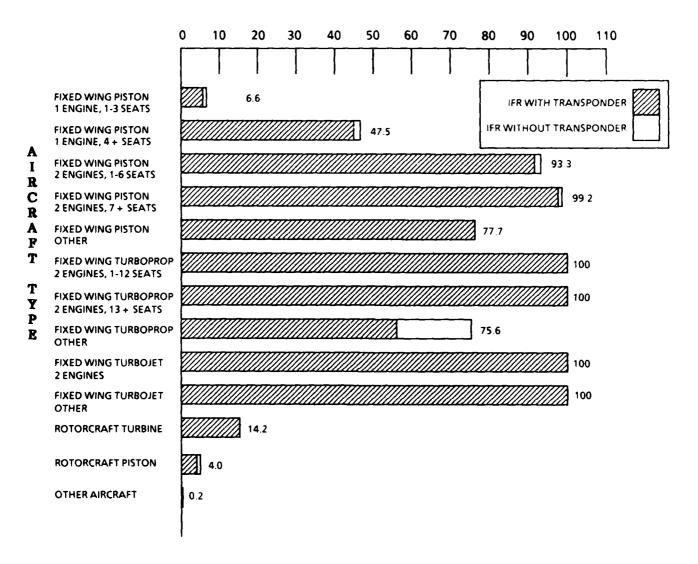
Table 2-10 shows IFR flight information in more detail and gives a breakdown of IFR hours flown by type of aircraft. It can be seen that general aviation aircraft flew approximately 8.2 million hours under IFR.

1.4.6.2 <u>Avionics Capability Groups</u> - Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often, several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

The methodology and assumptions for developing avionics capability groups are detailed in <u>General Aviation Avionics Statistics</u>. This report also contains a glossary which explains numerous terms relating to avionics equipment and the NAS.

¹General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp. 5-10.

PERCENT OF ACTIVE AIRCRAFT



SOURCE: TABLE 2-10

FIGURE 1.11. 1987 GENERAL AVIATION ACTIVE AIRCRAFT FLOWN IFR AND TRANSPONDER EQUIPPED

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

Table 2-25 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-25 reveals the following on the GA fleet:

- a. About 29 percent of GA aircraft have avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 59 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.
- b. About 77 percent of GA aircraft are equipped to fly IFR.
- c. About 14 percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 21 percent can land at either non-TCA controlled airports or Group III TCA's. Approximately 24 percent can land at any type of airport except a Group I TCA. About 40 percent can land at Group I TCA's.
- d. In general, Table 2-25 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sohisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e., no regulatory electronics), 74.5 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 88.9 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.
- e. LORAN-C and Omega, two types of Long Range Navigation equipment, have been added to the avionics section since the 1984 survey. These additions have had a strong impact on the reported total number of aircraft with Long Range Navigation equipment. In 1983 only 9,393 aircraft (3.6% of the total population) reported any type of Long Range Navigation equipment. By 1986, the number was 47,210 (17.6% of the population). By 1987, this number rose to 61,981 (23% of the population).

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
Group 1 No regulatory avionics	1. Up to and including 12,500 feet mean sea level (MSL) GlidersUp to and including 18,000 feet MSL ADFColored airways below 12,500 feet MSL VOR or RNAVVOR airways below 12,500 feet MSL RNAVLow altitude RNAV airways below 12,500 feet MSL
	2. VFR flight, day and night
	3. Uncontrolled airports
Group 2 Two-way communications	1. Up to and including 12,500 feet MSL GlidersUp to and including 18,000 feet MSL
	2. VFR flight, day and night
	3. Non-TCA controlled airports Group III TCA's Helicopters with 4096 code transponders Group III TCA's All helicoptersGroup I and II TCA's below 1,000 feet above ground level (AGL)
	NOTE: Air taxis with navigation system and transponder: Group II TCA's
	Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace
	Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
Group 3 Two-way communications Two systemsair taxis VOR or Automatic Direction Finder (ADF) or RNAV	1. Up to and including 12,500 feet MSL GlidersUp to and including 18,000 feet MSL ADFColored airways below 12,500 feet MSL VOR or RNAVVOR airways below 12,500 feet MSL RNAVLow altitude RNAV airways below 12,500 feet MSL
	2. IFR flight
	3. Non-TCA controlled airways Group III TCA's Helicopters with 4096 code transpondersGroup II TCA's All helicoptersGroup I and II TCA's below 1,000 feet AGL
Group 4 Two-way communications Two systemsair taxis 4096 code transponder VOR or RNAV	1. Up to and including 12,500 feet MSL GlidersUp to and including 18,000 feet MSL VOR airways below 12,500 feet MSL RNAVLow altitude RNAV airways below 12,500 feet MSL
	2. IFR flight
	3. Non-TCA controlled airports Group II TCA's HelicoptersGroup I TCA's below 1,000 feet AGL
Group 5 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace
	2. VFR flight, day and night
	3. Uncontrolled airports Group III TCA's

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
Group 6 Two-way communications 4096 code transponder Altitude encoding equipment	 Non-positive controlled airspace VFR flight, day and night Non-TCA controlled airports Group III TCA's HelicoptersGroup I TCA's
Group 7 Two-way communications Two systemsair taxis 4096 code transponder Altitude encoding equipment VOR	 Non-positive controlled airspace VOR airways IFR flight Group I TCA's
Group 8 Two-way communications Two systemsair taxis 4096 code transponder Altitude encoding equipment VOR } or RNAV DME	 Positive controlled airspace Jet routes RNAVRNAV routes IFR flight Group I TCA's

TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
Group 1 Localizer	Partial use of airport ILS
Group 2 Localizer Marker Beacon	Partial use of airport ILS
Group 3 Localizer Marker Beacon Glide Slope	Full use of airport ILS
Group 4 ILS Radar Altimeter	Landing approach in Category III ¹ weather conditions at airports with Category III equipment
Group 5 Long Range RNAV (LORAN-C, Omega, or other)	Area navigation over long distances and large bodies of water
Group 6 Radar Altimeter	Determination of altitude above level of terrain
Group 7 Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at airports with mountains and large buildings nearby
Group 8 ILS MLS	Backup landing systems
Group 9 Long Range RNAV (LORAN-C, Omega, or other) MLS	Sophisticated navigational and landing capabilities

¹See Appendix D, "Weather Category Definitions," <u>General Aviation Avionics</u> <u>Statistics</u> (1980 Data), (Washington, DC, 1981)

This increase probably reflects both the specific addition of LORAN-C and Omega to the survey form, as well as a rise in the number of aircraft containing LORAN-C receivers.

Tables 2-26 through 2-35 show distributions of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1987, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

TABLE 1-6. COMPUTED AIRCRAFT TYPE

TYPE	DESCRIPTION
l.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

- a. As in prior years, as the hierarchical CG's increase in sophistication, the predominant uses also change from personal, to business and personal, to executive and business (Table 2-26).
- b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal, to business and executive. For example, executive aircraft alone composes about 42 percent of the aircraft reporting both a radar altimeter and a complete ILS yet executive aircraft compose only 4.7 percent of the fleet (Table 2-31).
- c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in avionics equipment (Tables 2-27 and 2-32).
- d. Aircraft in the more sophisticated groups are newer aircraft on the average than those in less sophisticated CG's (Tables 2-28 and 2-33).

e. The computed aircraft type increases in sophistication as the level of avionics increases. (Tables 2-29 and 2-34).

1.4.7 Fuel Consumption Results

The general aviation aircraft fleet consumed an estimated 1,074 million gallons of fuel during 1987: 402 million gallons of aviation gasoline and 672 million gallons of jet fuel. From Figure 1.12, it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. The high rates account for turbojet's burning 38 percent of all fuel consumed in 1987, as shown in Figure 1.13, even though they represent only 2 percent of active aircraft. In spite of their low fuel consumption rates, fixed wing piston aircraft accounted for 37 percent of the fuel consumed in 1987 due to their high representation in the general aviation fleet. Table 2-21 shows more detailed fuel consumption estimates and their standard errors by aircraft type. Table 2-22 shows fuel consumption by SDR group.

Piston-powered aircraft consumed 393 million gallons of gasoline, including 22 million gallons of 80 octane gasoline, 80 million gallons of 100 octane gasoline, 266 million gallons of 100 octane low lead gasoline, and 23 million gallons of automobile gasoline. Figure 1-14 shows the distribution of fuel consumed by fuel grade. Table 2-23 gives more detailed data broken down by fuel grade and aircraft type.

1.4.8 Other Results

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 360 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-19. Appendix D contains definitions of these groups. The report also includes a table (Table 2-20) on mean hours and number of active engines for 76 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.

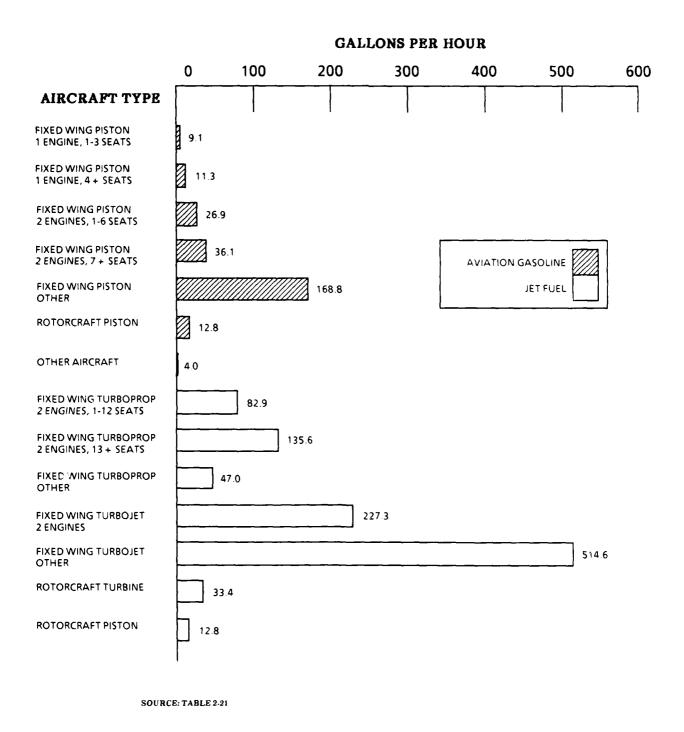


FIGURE 1.12. 1987 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE

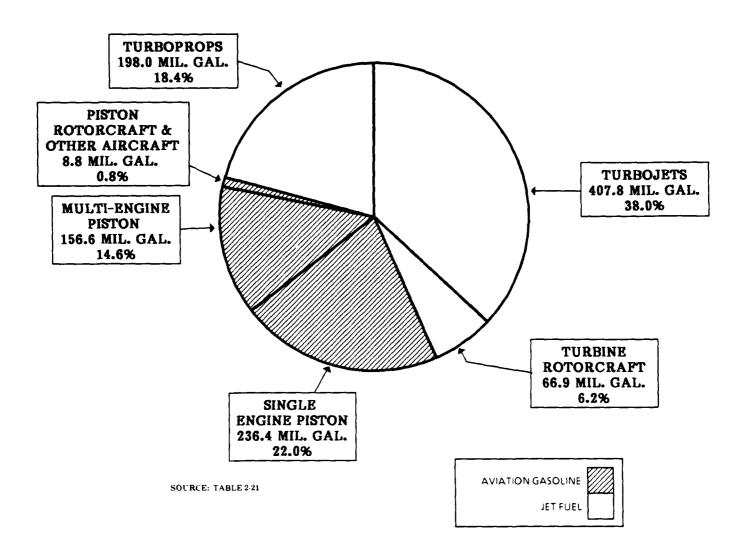
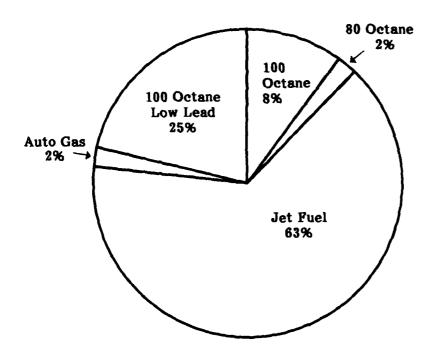


FIGURE 1.13. 1987 ESTIMATED FUEL CONSUMPTION BY AIRCRAFT TYPE



SOURCE: TABLE 2-23

FIGURE 1.14. 1987 GENERAL AVIATION FUEL CONSUMPTION BY FUEL GRADE

2. TABLES OF RESULTS

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN BY TYPE OF AIRCRAFT 1987

PAGE 1 OF 2

STANDARD PERCENT ERROR STANDARD ERROR			5.0 3.7	2.9 2.3	2.6 2.0	9.7 5.8	25.5 8.8	10.3 5.1	31.8 22.7	2.5 1.9		17.1 5.1	78.7 12.1	17.7 4.7	205.8 24.5	18.3 4.7
ESTIMATE STA Of Mean Eri Hours			134.4	126.4	129.4	165.3	289.2	202.9	140.2	136.9		337.2	651.5	374.2	839.9	388.9
PERCENT STANDARD ERROR			დ დ	2°.3	2.0	5.7	0.6	5.2	31.5	6 .		6.	12.0	5.0	24.7	5 .0
STANDARD ERROR			323420	311894	449309	149777	202275	251691	4811	515024		78477	61198	99518	45222	109311
ESTIMATE OF TOTAL Hours			8544660	13596268	22140926	2634748	2248402	4883150	15271	27039354		1482966	510681	1993647	183414	2177061
STANDARD ERROR			754	673	101	260	155	303	78	1055		83	31	97	6.	66
ESTIMATE OF NUMBER ACTIVE			63533	107502	171035	15741	7566	23307	112	194455		4337	723	2080	214	5274
POPULATION Size			87809	121486	209295	18196	9161	27357	322	236974		4775	848	5621	250	5871
; TYPE		- PISTON	SEATS	SEATS	TOTAL	SEATS	SEATS	TOTAL	OTHER	TOTAL	FIXED WING - TURBOPROP	SEATS	SEATS	TOTAL	OTHER	TOTAL
AIRCRAFT TYPE	FIXED WING	FIXED WING - PISTON	1 ENG: 1-3 SEATS	1 ENG: 4+ SEATS	1 ENGINE:	2 ENG: 1-6 SEATS	2 ENG: 7+	2 ENGINE:	PISTON:	PISTON:	FIXED WING	2 ENG: 1-12 SEATS	2 ENG: 13+	2 ENGINE:	TURBOPROP:	TURBOPROP:

TABLE 2 - 1

GENERAL AVIATION TOTAL HOURS FLOWN BY TYPE OF AIRCRAFT 1987

			TYPE	TYPE OF AIRCRAFT 1987				PA	PAGE 2 OF 2
AIRCRAFT TYPE	POPULATION	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING - TURBOJET	IDJET								
2 ENGINE TURBOJET	4126	3900	63	1420614	58735	4.4	371.5	14.3	ლ ლ
TURBOJET: OTHER	663	438	22	107 146	10703	10.0	229.2	22.1	7.0
TURBOJET: TOTAL	4789	4338	67	1527760	59702	න ල	356.2	13.0	9. E
FIXED WING: TOTAL	247634	204067	1062	30744174	529871	1.7	145.6	2 .s	1.7
ROTORCRAFT									
PISTON	5553	2813	140	651687	59786	9.5	228.9	17.9	7.8
TURBINE	4479	3520	147	1631439	156588	6 9	485.4	46.0	œ
ROTORCRAFT: TOTAL	10034	6333	203	2283126	167613	7.3	359.3	25.0	7.0
OTHER	9732	6783	228	415888	24731	න න	62.0	₩	
TOTAL	267400	217183	1105	33443186	556299	1.7	148.4	2. 4.	6 .

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT 1987

PAGE 1 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	2418	318	393849	67434
ALASKA	7496	485	1354044	118677
ARIZONA	5085	460	679885	90437
ARKANSAS	2724	332	507893	83845
CALIFORNIA	30982	1049	4605876	187386
COLORADO	4374	426	601468	76153
CONNECTICUT	2016	294	334117	58233
DELAWARE	827	185	147512	37784
DIST. OF COLUMBIA	37	35	3451	3310
FLORIDA	13614	727	2672939	212836
GEORGIA	4789	447	707 186	80248
HAWAII	486	140	163159	74793
IDAHO	2062	294	289314	50866
ILLINDIS	7688	55.59	1161470	147565
INDIANA	4098	415	553115	67589
IOWA	2910	351	465292	70423
KANSAS	3827	397	504599	64849
KENTUCKY	1615	265	255482	48483
LOUISIANA	3327	372	1066906	173232
MAINE	1301	233	147939	39509
MARYLAND	2660	336	382860	61937

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT 1987

PAGE 2 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
MASSACHUSETTS	3413	379	435247	53864
MICHIGAN	7 160	539	833246	73793
MINNESOTA	4959	447	636654	71236
MISSISSIPPI	2049	293	365304	61661
MISSOURI	4358	425	603553	71917
MONTANA	2154	307	353223	82784
NEBRASKA	2126	297	261068	47116
NEVADA	1817	272	262213	58052
NEW HAMPSHIRE	1338	237	176971	38946
NEW JERSEY	3898	400	584911	68519
NEW MEXICO	2121	296	278011	55718
NEW YORK	6431	503	962504	89307
NORTH CAROLINA	4944	453	71039:	86709
NORTH DAKOTA	1353	243	199848	50472
ОНІО	7850	268	1153683	109575
OKLAHOMA	3827	398	488003	65611
OREGON	4254	421	548070	58620
PENNSYLVANIA	5970	485	808540	75165
RHODE ISLAND	389	133	80184	37905
SOUTH CAROLINA	1782	277	341177	64620
SOUTH DAKOTA	1154	218	107322	25387

TABLE 2 - 2

GENERAL AVIATION TOTAL HOURS FLOWN
BY
STATE OF BASED AIRCRAFT
1987

PAGE 3 OF 3

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
TENNESSEE	3062	361	459755	61908
TEXAS	18358	836	2858746	178777
TAT	1070	210	495898	147644
VERMONT	654	161	62582	19457
VIRGINIA	3205	362	466470	59715
WASHINGTON	6232	502	795448	88071
WEST VIRGINIA	1046	218	122672	33649
WISCONSIN	4361	423	574886	74146
WYOMING	1035	212	125435	30372
PUERTO RICO	338	121	86655	27718
OTHER U.S. TERRITORIES	136	75	31878	14128
TOTAL	217183	1105	33443186	556299

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

TABLE 2 - 3
GENERAL AVIATION TOTAL HOURS FLOWN
BY
REGION OF BASED AIRCRAFT
1987

STANDARD ERROR	118677	128674	168206	239917	105762	200035	280596	277071	228033	556299
TE AL	4	112	120	25	42	56	14	58	74	86
ESTIMATE OF TOTAL HOURS	1354044	1834512	3478920	5220225	1237042	3208856	6004614	5199558	5547974	33443186
STANDARD ERROR	4 8	724	938	1153	609	952	1142	1101	1104	1105
ESTIMATE OF ACTIVE POPULATION	7496	13220	24076	38622	9111	21181	34747	30357	37884	217183
REGION	ALASKAN	CENTRAL	EASTERN	GREAT LAKES	NEW ENGLAND	NORTHWEST MT.	SOUTHERN	SOUTHWESTERN	WESTERN-PACIFIC	TOTAL

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

TABLE 2 - 4

PAGE 1 OF 3	TOTAL	8544664 3.8	13596265 2.3	22140932	2634749 5.7	2248402 9.0	4883151 5.2	15271 31.5	27039354 1.9	1482966 5.3
	OTHER	246487 18.9	110831 26.9	357318 15.5	24395 79.5	78259 23.8	102655 27.2	697 56.4	460670 13.4	86115 35.1
	AIR TAXI	00.	590922 20.6	590922 20.6	354016 21.1	58 1890 19 . 5	936006	7258 46.4	1534186 11.9	151263
	COMMUTER CARRIER	365 181.5	287675 28.6	288040 28.5	2129 90.2	570272 34.6	572401 33.6	00.	860441	169461 32.3
URS FLOWN Mary Use	OTHER	120532 38.9	121737 29.7	242269 24.3	270 91.6	37451 59.4	37721 57.2	00.0	27 9 990 22.2	00.
GENERAL AVIATION TOTAL MOURS FLOWN IN ALL REGIONS BY AIRCRAFT TYPE AND PRIMARY USE 1987	AERIAL Obs	335312 25.6	605491 22.3	940803	27040	44874 34.7	71914 30.8	0	1012717	00
	AERIAL APPL	1314274 6.3	43996 70.3	1358270 6.2	3495 82.9	3622 55.2	7117	6797 7.6	1372184 6.2	583 235.0
GENERAL BY AIR	INSTRUC- TIONAL	3025632 8 . 8	1491931	4517563 7.2	133485	18406 77.0	151892 21.0	293 145.2	4669747 7.0	33758 82.2
	PER-SONAL	3280048	6584205 2.8	9864253 2.4	504525 8.7	115573 21.6	620098 8.1	226 126.2	10484577	17981
	BUSI- NESS	218333	3485104 4.5	3703437 4.4	1239195 t0.9	400118 13.8	1639313 8.9	00.	5342750 104 4.0	139976 24.4
	EXECU- TIVE	STDN TS 3678 80.9	75 274375 19.1	AL 278053 18.7	75 346197 17.6	75 397836 14.3	AL 744033 11.3	8.00	AL 1022086 9.6	RBOPROP TS 903829 6.7
	AIRCRAFT TYPE	FIXED WING - PISTON FIXED WING - PISTON 1 ENG: 1-3 SEATS EST.TOT.HQURS % STD. ERROR	1 ENG: 4+ SEATS EST.TOT.HOURS % STD. ERROR	1 ENGINE: TOTAL EST.TOT.HOURS % STD. ERROR	2 ENG: 1-6 SEATS EST.TOT.HOURS % STD. ERROR	2 ENG: 7+ SEATS EST.TOT.HOURS % STD. ERROR	2 ENGINE: TOTAL EST.TOT.HOURS % STD. ERROR	PISTON: OTHER EST. TOT. HOURS % STD. ERROR	PISTON: TOTAL EST. TOT. HOURS 1 % STD. ERROR	FIXED WING - TURBOPROP 2 ENG: 1-12 SEATS EST.TOT.HOURS 90382. % STD. ERROR 6.

ABLE 2 - 4

PAGE 2 OF 3	TOTAL	510681 12.0	1993647 5.0	183414	2177061	1420B14 4.1	107146 10.0	1527760 3.9	30744172	651687 9.2
	OTHER	21794	87809 27.1	14502 58 . 5	102411	76193 32.2	13027	89220 22.5	652301 10.8	89368 22.5
	AIR TAXI	68228 35.4	219491 20.3	61928 36.0	281419 17.9	171266 21.9	00	171266 21.9	1986871 9.9	5311 82.0
	COMMUTER CARRIER	287451 19.9	456912 17.3	31502 118.2	488415	4625 222.0	00.	4625 222.0	1353481 16.1	00
TOTAL HOURS FLOWN REGIONS AND PRIMARY USE	OTHER	10048 79.8	10048 79.8	00.	10048 79.8	0 0	6 161.0	6 161.0	290044	40799 36.9
TOTAL HOU L REGIONS E AND PRIM	AERIAL OBS	3759 44.5	3759 44.5	10927 76.9	14686 47.2	1281 135.2	00	1281 135.2	1028684 16.0	186445 24.0
GENERAL AVIATION TOTAL HOURS FLOWN IN ALL REGIONS BY AIRCRAFT TYPE AND PRIMARY USE 1987	AERIAL APPL	00.	583 235.0	63289 33.8	63872 33.6	00	00	00.	1436057 6.0	138599 18.3
GENERAL BY AIR	INSTRUC- TIONAL	374 144.2	34132	00	34132 78.1	623 89.6	69 72.3	693 67.0	4704571 6.9	123791
	PER- SONAL	397 279.6	18378 41.5	307 368 . 3	18685	1202 157.2	1394 40.9	2597 44.5	10505858	30545 16.3
	BUSI -	4879	144855 23.5	00.0	144855 23.5	118981 28.4	19079 37.9	138060 25.4	5625664 3.9	34779 30.1
	EXECU- TIVE	TS 113750 15.3	AL 1017579 6.2	ER 960 202.8	AL 1018539 6.2	RBOJET ET 1048442 5.6	FR 73569 12.1	AL 1120012 5.3	AL 3160638 4.6	2050 83.4
	AIRCRAFT TYPE	2 ENG: 13+ SEATS EST.TOT.HOURS % STD. ERROR	2 ENGINE: TOTAL EST.TOT.HOURS 1 % STD. ERROR	TURBOPROP: OTHER EST.TOT.HOURS % STD. ERROR	TURBOPROP: TOTAL EST.TOT.HOURS % STD. ERROR	FIXED WING - TURBOJET 2 ENGINE TURBOJET EST.TOT.HOURS 10464 % STD. ERROR 5	TURBOJET: OTHER EST.TOT.HOURS % STD. ERROR	TURBOJET: TOTAL EST.TOT.HOURS 1 % STD. ERROR	FIXED WING: TOTAL EST.TOT.HOURS 3 % STD. ERROR	ROTORCRAFT PISTON EST.TOT.HOURS % STD. ERROR

TABLE 2 - 4

GENERAL AVIATION TOTAL HOURS FLOWN IN ALL REGIONS BY AIRCRAFT TYPE AND PRIMARY USE 1987

PAGE 3 OF 3	TOTAL	1631439 9.6	2283126 7.3	4 88 88 89 . Z	33443186 1.7
	OTHER	154445 31.6	243813	46 772 26.0	942886 8.8
	AIR	884820 19.5	890131 18.4	0 0 0	2877002 8.8
	COMMUTER CARRIER	5198 126.5	5198 126.5	00.	1358679 16.1
	OTHER WORK	29208 46.6	70007	19342 32.8	379393 17.3
1987	AERIAL OBS	173903 47.3	360348 24.5	23016 32.2	1412047 13.2
	AERIAL APPL	91361	229960 18.0	00	16660 17 5 . 6
	INSTRUC- TIONAL	4694	128485	71011	4904066 6.7
	PER- SONAL	16168 47.6	46714 17.0	234032 7.3	
	BUSI-	42855 38.8	77634 23.2	9931 53.2	5713229 10786604 3.8 2.3
	EXECU- TIVE	228786 21.9	AL 230836 21.4	11786 64.1	3403260 4.5
	AIRCRAFT TYPE	TURBINE EST.TOT.HOURS % STD. ERROR	ROTORCRAFT: TOTAL EST.TOT.HOURS % STD. ERROR	OTHER EST.TOT.HOURS % STD. ERROR	TOTAL EST.TOT.HOURS % STD. ERROR

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. ROW SUMMATIONS MAY DIFFER FROM PRINTED TOTALS BECAUSE SOME ACTIVE AIRCRAFT DID NOT REPORT USE.

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

PAGE 1 OF 18

PERCENT STANDARD ERROR	88	18.4	37.0	82.1	38.6	19.8	34.1	56.6	13.3	19.6	21.1	21.2	13.1	26.6	24.9	29.6	6.5	43.0	19.4	16.8	37.0
STANDARD ERROR	5.0	22.8	21.1	135.0	47.4	151.0	221.0	352.1	44.4	27.8	30.2	61.8	6.3	14.5	11.0	141.8	25.3	184.2	73.9	15.6	42.5
ESTIMATE OF MEAN HOURS	61.1	123.8	57.0	164.4	129.6	762.0	648.6	622.2	333.9	141.3	143.2	291.4	48.2	54.3	44.4	479.1	389.8	428.7	380.9	92.8	114.6
PERCENT STANDARD ERROR	9	19.5	40.9	85.6	54.2	21.3	35.4	60.4	15.4	20.6	23.1	35.1	15.2	29.7	34.8	35.5	170.5	76.3	21.6	26.5	45.7
STANDARD ERROR	55629	31175	3799	17036	4590	43043	46060	34378	26425	5512	24110	16419	15819	1821	189	20142	11007	5153	3114	2156	602
ESTIMATE OF TOTAL HOURS	591850	160029	9287	19892	8471	201825	130285	56931	171934	26728	104260	46713	104170	6129	542	56669	6455	6752	14387	8124	1318
GROUP	16253	1698	318	186	162	311	234	127	572	268	1884	317	3205	132	40	138	92	36	42	225	23
MANUFACTURER/ MODEL GROUP	OTHER 1	OTHER 2	OTHER 3	OTHER 4	OTHER 5	OTHER 6	OTHER 7	OTHER 8	OTHER 9	OTHER 10	OTHER 11	OTHER 12	OTHER 13	ADAMS A50S	AERORSJ2	AEROSPAS355	AEROSPSA316	AGUSTA205	AGUSTAA109	AIRPTSA	AIRSPC18

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT
BELONGING TO MANUFACTURER/MODEL GROUPS OF FEWER THAN
20 AIRCRAFT IN SIZE FOR AIRCRAFT TYPE XX WHERE XX STANDS
FOR

- 01 FIXED WING PISTON, 1 ENGINE, 1-3, SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE, 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SOR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

PAGE 2 OF 18

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

PAGE 3 OF 18

MANJFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL Hours	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BBAVIA7	3529	223799	27894	12.5	4.06	& 6	9.01
BBAVIA8	229	22262	4656	20.9	107.9	21.6	20.1
BEECH 100	247	79499	11069	13.9	321.9	44.8	13.9
BEECH 17	207	4500	1216	27.0	51.0	6	17.5
BEECH 18	819	98296	25236	25.4	231.4	57.3	24.8
BEECH 1900	28	4 1008	11563	28.2	1586.6	415.2	26.2
BEECH 200	840	267625	33757	12.6	373.5	37.7	10.1
BEECH 23	2782	303136	36803	12.1	118.8	13.9	11.7
ВЕЕСН 300	94	32577	3885	12.2	346.6	42.4	12.2
BEECH 33	1808	228086	19589	89.69	133.7	10.6	7.9
BEECH 35	6843	576831	40438	7.0	8.4.8	.	6 .3
BEECH 36	2283	382866	28456	4.7	168.6	12.4	7.4
BEECH 45	287	19511	5045	25.9	101.9	19.9	19.5
BEECH 50	317	12797	3401	26.6	64.2	1.1	17.3
BEECH 55	2239	253180	23926	9 .5	121.4	10.7	80
BEECH 56	61	8457	2287	27.0	196.0	47.6	24.3
BEECH 58	1516	283509	35446	12.5	194.7	23.4	12.0
BEECH 60	434	66201	9236	14.5	161.5	20.9	13.0
BEECH 65	122	8066	6513	80.7	88.3	6.39	75.8
BEECH 76	300	85363	16737	19.6	286.1	τυ τυ εν	19 . 5
BEECH 77	243	45913	12017	26.2	190.2	49.6	26.1

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

PAGE 4 OF 18

MANUFACTURER/ Model Group	GROUP	ESTIMATE OF Total Hours	STANDARD	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD	PERCENT STANDARD ERROR
BEECH 80	162	26601	9248	34.8	271.0	71.3	26.3
веесн 90	1126	279816	34651	12.4	269.7	30.7	11.4
BEECH 95	464	44476	7900	17.8	110.0	16.1	14.6
BEECH 99	16	61169	24213	39.6	748.6	278.2	37.2
BELL 204	188	7014	3348	47.7	78.5	24.3	30.9
BELL 206	1936	1015919	145820	14.4	589.5	76.5	13.0
BELL 212	8	34453	12372	35.9	468.2	79.2	16.9
BELL 222	80	21386	6831	31.9	271.8	85.9	31.6
BELL 412	49	39430	13360	33.9	804.7	272.7	33.9
BELL 47	1299	187637	29566	15.8	241.1	24.0	Ø.
BLANCA11	82	2050	419	20.4	44.4	Ø.	15.6
BLANCA1413	264	9518	4551	47.8	4.07	14.7	20.9
BLANCA1419	271	11937	5383	45.1	74.9	29.9	38.8
BLANCA17	1041	67678	10349	15.3	70.7	10.0	14.1
BLANCA7	2356	221581	39482	17.8	111.8	19.2	17.1
BLANCA8	472	31834	4289	13.5	71.4	o.	12.6
BNORM BN2	76	44095	11652	26.4	669.5	143.5	21.4
BOE ING707	4 8	139	393	282.7	55.0	0.0	0.0
BOEING727	36	16390	3425	20.9	455.3	95.1	20.9
BOEING75	1910	61616	10704	17.4	65.7	60	13.4
BOLKMS 105	112	23960	4308	18.0	213.9	38.5	18.0

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BOLKMS117	53	32668	3311	10.1	616.4	62.5	10.1
BRAERODH125	70	18721	3630	49.4	314.0	50.9	16.2
BRASOVIS28	8	2146	565	26.3	71.1	11.5	16.1
BRWSTRFLEET2	28	1424	1339	94.0	121.7	110.6	90.9
BRWSTRFLEET7	23	565	150	26.5	46.7	8.7	18.6
BUKER 131	32	1513	390	25.8	88.3	11.8	13.4
CAMRONMODELO	237	7679	1783	23.2	41.9	8 9.3	19.7
CASA C212	37	6925	3100	8.44	526.4	73.9	14.0
CESSNA120	872	40088	5877	14.7	59.0	7.0	11.8
CESSNA 140	2378	93531	9149	ου ου	59.3	4.7	8.0
CESSNA 150	19255	3707766	264491	7.1	213.1	14.8	6.0
CESSNA170	2462	172041	21814	12.7	82.4	9.6	11.6
CESSNA172	25158	3118436	209519	6.7	135.2	с э.	8. 8.
CESSNA 175	1299	49688	6122	12.3	48.8	5	10.8
CESSNA177	2874	244483	24872	10.2	91.5	6 9.	9.7
CESSNA180	2691	255935	39639	15.5	111.8	16. 1	14.4
CESSNA182	13921	1554257	72262	4.6	117.2	5.2	4. Ri
CESSNA 185	1573	232280	25805	11.1	161.5	17.2	10.6
CESSNA 188	1653	313441	50199	16.0	227.1	32.3	14.2
CESSNA 190	88	4206	758	18.0	64.3	69. 69	4.61
CESSNA 195	502	24865	4583	18.4	9.02	11.2	15.8

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERRUR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESSNA205	242	22869	6132	26.8	4.68	25.2	25.3
CESSNA206	2796	424219	53582	12.6	168.3	20.2	12.0
CESSNA207	346	289390	56287	19.5	836.4	162.7	19.5
CESSNA208	47	63195	20144	31.9	1344.6	428.6	31.9
CESSNA2 10	6130	773374	66527	89.	140.4	11.2	8
CESSNA303	183	47400	14150	29.9	262.5	78.1	29.7
CESSNA305	274	28524	5008	17.6	137.1	20.7	15.1
CESSNA310	3101	382529	53275	13.9	144.2	18.9	13.1
CESSNA320	313	29882	5136	17.1	124.3	18.5	14.9
CESSNA335	45	8072	1025	12.7	179.4	22.8	12.7
CESSNA336	7.7	2283	475	20.8	50.7	8.0	15.7
CESSNA337	1180	123538	27258	22.1	128.1	26.4	20.6
CESSNA340	922	165087	19790	12.0	180.7	21.4	11.8
CESSNA401	215	33240	6692	20.1	179.0	29.7	16.6
CESSNA402	565	444950	106941	24.0	926.5	184.0	19.9
CESSNA404	135	7096	22500	317.1	56.8	179.7	316.5
CESSNA411	141	7664	3161	41.2	102.5	36.5	35.6
CESSNA414	177	148912	21807	14.6	197.1	28.1	14.3
CESSNA421	1243	298994	40510	13.5	272.7	32.3	11.8
CESSNA425	185	58459	8215	14.1	316.0	4.4	14.1
CESSNA441	234	95609	8490	13.9	260.5	36.3	13.9

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESSNA500	818	225371	24791	11.0	364.7	40.1	11.0
CESSNA501	42	13329	713	e.	317.4	17.0	5.3
CESSNABSO	117	68703	5800	œ 4.	587.2	49.6	₩.
CESSNAT50	65	423	277	65.3	38.1	φ. Φ.	18.0
CESSNAUC94	35	171	310	40.2	81.5	23.4	28.7
CHILD S1	8	3710	880	24.0	66.2	14.7	22.2
CHILD S2	174	13455	2961	22.0	80.0	17.0	21.3
CNDAIRCLBOO	97	40219	5748	14.3	448.7	47.2	10.5
CNTRAR 101	32	1914	350	18.3	68.4	10.1	14.8
COMMTH185	113	1394	503	36.1	48.1	11.7	24.3
CONAERLA4	481	34522	6028	17.6	75.7	12.6	16.8
CURTISC46	23	0	0	0.0	0.0	0.0	0.0
CURTISJR	26	26	6-	74.9	7.5	6.0	11.4
CURTISROBIN	37	8	61	106.0	.	.	28.7
CURTISTRVAIR	191	2741	871	31.8	56.9	14.7	25.9
CVAC 240	38	1225	1257	102.6	91.3	76.7	84.0
CVAC BT13	114	1530	269	37.2	48.2	6 9	13.8
CVAC STC580	43	3449	1826	52.9	106.9	44.5	41.6
DART G	26	325	181	55.6	62.5	13.0	20.8
DHAV DHC1	8	6270	1322	21.1	80.8	13.3	18.4
DHAV DHC2	250	52807	23328	44.2	249.0	102.3	41.1

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUF	MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
DHAV	DHC3	6	7928	682	8 9	198.2	17.1	©
DHAV	DHC4	25	2700	•	0.0	108.0	0.0	0.0
DHAV	DHAV DHC6	9	84042	22488	26.8	1170.9	258.3	22.1
DHAVX	DHAVXXDH82	80	2959	888	30.0	62.2	13.4	21.6
DOUG A26	A26	31	282	170	60.2	33.3	7.6	22.7
DOUG	DC3	347	32271	9747	30.2	160.3	43.3	27.0
DOUG	DC4	70	3520	1170	33.2	185.7	19.2	10.3
D000	900	8	0	٥	0.0	0.0	0.0	0.0
DOUG	DC7	32	3280	841	25.7	117.1	13.5	11.5
DONG	DC8	50 25	1610	3474	215.7	232.0	0.0	0.0
DOUG	DC9	7.1	20915	11519	55.1	294.6	162.2	55.1
EAGLE DW	***	76	13115	3045	23.2	237.3	25.0	10.6
EAGLEBC7	BC7	99	2023	468	23.1	31.4	7.1	22.5
E I RVON20	N20	41.	8790	1101	12.5	80.7	8.7	12.0
EMAIR MA1	. MA1	22	0	0	0.0	0.0	0.0	0.0
EMB	110	2	0669	7253	103.8	162.4	167.2	103.0
ENSTRMF28	MF28	442	69848	19302	27.8	227.0	63.4	27.9
FLEET 168	168	24	427	126	29.4	31.1	9.9	21.2
FRCHLD24	D24	294	1655	896	58.5	38.5	11.8	30.5
FRCHL	FRCHLDC119	58	0	0	0.0	0.0	0.0	0.0
FRCHLDM62	DM62	240	4118	832	20.2	37.2	ио С	15.2

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
GENBALAX6	65	1557	424	27.2	26.5	ru eo	21.9
GLASFL201	35	1812	458	25.3	65.4	12.9	19.7
GLASFLH301	113	7640	1645	21.5	70.5	14.8	21.0
GROB 103CAT	89	12532	1859	14.8	237.1	34.1	14.4
GRUB 109	69	4153	1337	32.2	70.8	22.0	31.2
GROB ASTIR	99	4918	101	14.2	86.1	11.5	13.4
GRTLKS271	181	11217	2029	18.1	77.0	11.3	14.7
GRUMANSA 16	20	1125	614	54.6	300.0	0.0	0.0
GRUMAVAA1	563	49571	5402	10.9	99.2	10.0	10.1
GRUMAVAAS	1050	102926	15233	14.8	98.1	14.5	14.8
GRUMAVG1158	39	11823	1488	12.6	319.1	35.6	11.2
GRUMAVG164	1180	280954	50803	18.1	290.2	43.1	14.9
GRUMAVG21	46	4242	2543	60.0	191.0	0.0	0.0
GRUMAVTBM	38	425	169	39.7	32.0	7.3	22.7
GULSTM112	688	65349	12260	18.8	103.4	18.0	17.4
GULSTM500	290	63844	15228	23.9	266.2	58.5	22.0
GUL STM520		1700	1350	79.4	170.0	19.2	11.3
GULSTM560	113	7519	2487	33.1	8.8	21.9	22.0
GULSTMB80	316	32414	13331	41.1	154.2	52.6	34.1
GULSTM680TP	88	1071	2026	28.7	126.6	23.4	5
GULSTM690TC	27	7155	949	13.3	265.0	35.1	13.3

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
GULSTM690TP	438	155022	25880	16.7	360.7	58.7	16.3
GULSTMAA1	587	31897	6693	21.0	2.77	11.9	15.3
GULSTMAAS	649	96951	21543	22.2	166.2	36.2	21.8
GULSTMG1159	166	68708	10633	15.5	439.3	4.09	13.7
GULSTMG159	116	44140	9270	21.0	469.5	75.1	16.0
GULSTMG44	75	4431	1177	26.6	94.2	a	10.1
GULSTMG73	25	6988	1869	26.7	642.9	91.8	14.3
GULSTMGA7	26	12065	3242	26.9	215.5	57.9	26.9
H23/HTE	39	4803	1566	32.6	185.1	35.1	19.0
H34/55	30	217	566	261.2	130.0	0.0	0.0
HELIO H295	105	11494	3704	32.2	128.2	37.3	29.1
HELIG H391	23	227	138	60.9	69.0	7.6	14.1
HILLERFH1100	99	2654	2008	75.7	64.3	44.6	69.4
HILLERUH12	564	47501	12193	25.7	212.0	31.6	14.9
HUGHES289	703	180581	33979	18.8	397.6	63.9	16.1
HUGHES369	634	139087	31260	22.5	315.8	53.2	16.9
HWKSLYDH104	33	825	923	111.9	200.0	0.0	0.0
HWKSLYDH125	192	54359	8318	15.3	297.0	40.1	13.5
HYNES B2	128	855	518	60.6	24.0	ω ω	36.0
INTRCP200	33	2479	680	27.4	78.4	20.7	26.4
ISRAEL 1121	101	17559	7042	40, 1	202.8	77.5	38.2

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
ISRAEL 1123	25	4748	1372	28.9	189.9	54.9	28.9
ISRAEL1124	205	62771	8611	13.7	306.2	42.0	13.7
JBMSTRDGA 15	80	1390	322	25.5	4.1	8.	13.4
LAIKFN10	37	•	•	0.0	0.0	0.0	0.0
LEAR 23	52	12009	3987	33.2	283.0	73.1	25.8
LEAR 24	180	36790	14472	38.3	314.4	85.1	27.1
LEAR 25	255	112191	24167	21.5	454.7	95.2	20.9
LEAR 35	420	169466	17504	10.3	403.5	41.7	10.3
LEAR 55	87	41977	4878	11.6	432.7	50.3	11.6
LET L13	156	11263	1291	11.5	90.7	.	10.0
LKHEED 12A	20	356	189	53.0	45.1	14.5	32.1
LKHEED1329	8	22802	3884	17.0	281.5	40.1	14.2
LKHEED 18	8	1643	1307	79.5	85.0	0.0	0.0
LKHEEDP2V	24	•	0	0.0	0.0	0.0	0.0
LKHEEDPV1	38	657	535	81.4	59.0	28.4	48.1
LKHEEDT33	47	372	272	72.9	52.8	12.8	24.3
LUSCOM8	2179	75154	13298	17.7	60.0	8.2	13.6
MART IN404	23	27	38	148.0	15.0	0.0	0.0
MAULE M4	275	12758	2472	19.4	57.6	ю	16.4
MAULE MS	456	35191	4494	12.8	86.3	10.3	12.0
MAULE MG	76	9622	1507	15.7	148.5	21.6	14.6

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ MODEL GROUP	GROUP	ESTIMATE 0F TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN Hours	STANDARD ERROR	PERCENT STANDARD ERROR
MCLISHFUNKB	143	2959	630	21.3	41.2	4.0	15. S
MEYERSOTW	51	858	272	28.4	₹. •	7.9	15.3
MNCOUP90	88	612	144	23.6	30.2	3.1	10.4
MAMITEM 18	148	4134	1199	29.0	57.7	13.6	23.6
MOONEYM20	6378	651918	49260	7.6	115.3	89	6.9
MRCHT1S205	45	1184	270	22.8	41.3	6.1	14.8
MTSBSIMU2	322	47293	12557	26.6	232.9	39.8	17.1
MTSBSIMU300	75	23396	3242	13.9	311.9	43.2	13.9
MULTECD 16	38	898	323	33,4	45.3	10.2	22.6
NAMER 825	53	828	363	37.9	43.6	89	19.7
NAMER F51	145	5274	1023	19.4	47.6	65	16.8
NAMER NA260	163	4728	1671	35.3	73.7	13.8	18.8
NAMER TG	577	35349	11453	32.4	9.69	21.3	30.6
NATBAL752	32	915	248	27.1	29.8	7.9	26.4
NAVAL N3N	131	1088	555	51.0	30.2	12.1	40.2
NAVIONNAVION	576	18312	4523	24.7	54.2	10.1	18.6
NORD 3202	27	1440	288	40.9	80.0	12.6	15.8
NORD SV4	45	973	290	29.8	48.7	4.	10.0
NORWST65	22	558	227	40.7	35.4	6.7	27.5
ORLHELH19	73	913	1002	109.8	100.0	0.0	0.0
ORLHELS58	35	8151	4263	52.3	419.2	153.7	36.7

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ MODEL GROUP	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD	PERCENT STANDARD ERROR
PARTENP68	4	15067	2385	15.8	376.7	59.6	15.8
PICARDAX6	150	817	426	52.1	31.6	12.1	38.3
PILATS84	26	4075	1341	32.9	164.6	53.6	32.6
PIPER 600	393	67579	6287	8.3	172.0	16.0	6.6
PIPER E2	20	« 0	Ø	68.1	5.0	0.0	0.0
PIPER J2	63	418	134	32.2	18.6	4.0	21.3
PIPER J3	4258	197697	55787	28.2	91.6	24.3	26.6
PIPER J4	251	5742	1114	19.4	51.0	6.9	13.6
PIPER JS	352	17692	5925	33.5	100.2	31.0	30.9
PIPER PA12	1366	69478	12274	17.7	75.1	11.5	15 .3
PIPER PA14	101	4701	713	15.2	73.5	œ Ľ	11.6
PIPER PA15	190	9043	2059	22.8	78.9	12.5	15.8
PIPER PA16	366	13229	4620	34.9	68.5	16.0	23.3
PIPER PA17	113	2975	530	17.8	49.1	89 89	13.8
PIPER PA18	3598	392731	70756	18.0	145.4	24.1	16.6
PIPER PA20	454	25452	8624	33.9	87.5	27.3	31.1
PIPER PA22	4806	207135	24102	11.6	71.4	6 9	60
PIPER PA23	3332	516640	111246	21.5	187.5	39.0	20.8
PIPER PA24	3207	279920	33262	11.9	101.5	11.1	11.0
PIPER PA25	1208	182860	35341	19.3	171.7	31.2	18.2
PIPER PA28	22324	2607801	133690	5. 1	127.0	ල ම	5.0

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL Hours	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
PIPER PA30	1241	159468	19842	12.4	142.2	15.9	11.2
PIPER PA31	1889	727107	155896	21.4	444.2	103.3	23.2
PIPER PA31T	543	138457	21605	15.6	258.2	39.8	45.4
PIPER PA32	4365	676678	82328	12.2	162.1	4.61	12.0
PIPER PA34	1970	340239	37331	11.0	177.4	18.9	10.7
PIPER PA36	363	65453	13569	20.7	216.4	38.5	17.8
PIPER PA38	1421	425019	95169	22.4	327.0	71.4	21.8
PIPER PA42	113	43082	4385	10.2	381.3	38.8	10.2
PIPER PA44	330	84752	14139	16.7	263.7	43.2	16.4
PIPER PA46	274	67517	9099	8.6	246.4	24.1	&
PR0PJT200	11	3619	823	22.8	56.1	1.8	21.0
RAVEN RXG	207	1412	526	37.2	15.1	2.9	19.4
RAVEN S50	86	761	252	33.1	36.0	8	18.0
RAVEN S55	811	24199	5627	23.3	45.4	7.5	16.6
RAVEN SGO	223	10644	1702	16.0	48.7	7.5	15.4
RAVEN SGG	49	4236	1081	25.5	107.3	21.7	20.2
RKWELL500	34	7438	1101	14.8	218.8	32.4	14.8
RKWELL700	25	6013	1214	20.3	284.3	46.1	16.2
RKWELLNA285	308	93476	9756	10.4	312.6	30.4	9.7
ROBSINR22	243	51571	20698	40.1	232.9	91.5	39.3
ROLSCHLS	102	9166	1819	19.9	89.8	17.8	19.9

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GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL Hours	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENI STANDARD ERROR
RYAN ST3	168	3165	749	23.7	34.2	κn œ	17.1
RYAN STA	34	472	127	26.8	26.9	3.8	11.8
SAAB SF340	12	9200	1636	17.8	7.66.7	136.3	17.8
SCHLERASK21	32	8718	1636	18.8	249.1	46.7	18.8
SCHLERASW15	32	1106	232	21.0	34.6	6 .	20.1
SCHLERASW19	29	1114	299	26.8	29.8	4.0	18.2
SCHLERASW20	9 6	5567	1338	24.0	70.8	35.0	21.2
SCHLERK8	23	552	162	29.3	48.0	10.0	20.7
SCHLERKAG	74	1887	540	28.6	39.0	σο	22.9
SCWZERG164	219	32612	14121	43.3	215.8	81.9	37.9
SCWZERSG1	758	23091	4401	19.1	46.3	7.2	15.6
SCWZERSG2	572	73840	14746	20.0	184.2	32.8	17.8
SEMCO MODELT	27	21	23	111.8	10.0	0.0	0.0
SKRSKY S55	28	282	523	52.5	63.3	22.4	35.3
SKRSKYS58	69	4651	2069	44.5	155.5	29.0	18 . 6
SKRSKYS58T	31	8007	2950	36.8	413.2	98.3	23.8
SKRSKYS61	29	6320	3013	47.7	472.2	126.9	26.9
SKRSKYS76	164	75847	19594	25.8	551.8	124.5	22.6
SLINDS100	301	19981	4645	23.2	85 8.	17.3	20.2
SMITH 600	366	139476	48045	34.4	412.1	137.6	33.4
SNIAS 350	226	75749	24637	32.5	347.0	109.0	31.4

TABLE 2 - 5

GENEKAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANNIFACTURER/MODEL GROUP 1987

PAGE 16 OF 18

MANUFACTURER/ MODEL GROUP	GROUP S I Z E	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
SNIAS SA318	21	0	0	0.0	0.0	0.0	0.0
SNIAS SA341	36	4435	1174	26.5	139.6	33.7	24.2
SOCATAMS894	39	5542	2487	44.9	161.5	71.0	44.0
SOCATARALLYE	22	1148	256	22.3	78.3	7.6	7.6
SOCATAT8 10	45	5593	2354	42.1	217.5	45.4	20.9
SOCATATB20	82	20016	5136	25.7	244.1	62.6	25.7
SPHRTHCIRRUS	97	4174	1439	34.5	67.1	19.6	29.3
SPHRTHNIMBUS	ľ.	4084	635	15.5	86.1	12.2	14.1
SPHRTHVENTUS	45	6302	1355	21.5	140.0	30.1	21.5
STBROSSD3	20	43905	363	0.8	2195.3	18.2	8.0
STNSON10	161	2130	778	36.5	47.7	11.6	24.2
STNSONLS	125	3148	80	28.6	8.64	11.9	23.9
STNSONSR9	26	143	52	36.6	30.3	4 .	16.1
STNSONV77	103	1180	262	22.2	30.7	4.0	13.1
STOLAMRC3	223	2243	550	24.5	29.3	5.2	17.8
SUPAC LA	66	1425	459	32.2	52.7	12.2	23.1
SUPAC V	31	.	90	66.1	11.8	3.1	26.5
SWRNGNSA226	142	76009	15525	20.4	535.9	97.6	18.2
SWRNGNSA227	74	70685	18013	25.5	955.2	243.4	25.5
SWRNGNSA26	46	17642	5729	32.5	217.3	64.3	29.6
TCRAFK21	21	1546	251	16.2	73.6	12.0	16.2

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

				MANUFACTU	MANUFACTURER/MODEL GROUP 1987	ano O	PAGE	E 17 OF 18
MANUI	MANUFACTURER/ Model Group	GROUP	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
TCRAFKD	FKD	295	10902	3124	28.7	63.2	13.8	21.9
TCRAFTA	FTA	33	259	194	75.0	94.0	0.0	0.0
TCRAFTBC	FTBC	1856	81673	17030	20.9	80.0	13.7	17.1
TCRAFTBF	FTBF	42	1324	360	27.2	67.2	12.6	18.8
TCRAFTBL	FTBL	229	3302	1162	35.2	28.4	8 . 4 .	29.5
TEMC	TEMCO 11A	29	285	176	61.8	46.8	80	17.9
THSS		96	1378	987	71.6	78.8	50.1	63.5
THUN	THUNDRAX7	80	2227	289	13.0	32.6	3.5	10.7
TMPS(TMPSONNAVION	638	50038	23990	47.9	96.7	44.8	46.3
TRYTEK65	EK65	350	5764	1134	19.7	48.8	7.2	14.8
TRYTEKK	EKK	32	69	38	8.4.8	13.0	1 .5	9.11
UNIV	UNI VACGC 1	680	34541	10431	30.2	76.1	20.2	26.6
7AINO	UNIVAR 108	2011	54444	7507	13.8	50.1	4.4	8.7
UNIV	UNIVAR415	2395	62784	8639	13.8	40.1	4.3	10.7
VARG	VARGA 2150	131	10855	1589	14.6	88.1	12.4	14.1
WACD	ASO	30	175	80	47.8	40.8	10.3	25.2
WACD	GXE	37	285	123	43.0	37.4	11.7	31.3
WACO	œ	32	169	40	23.8	12.3	2.4	4.61
WACO	UPF7	167	4313	1249	29.0	53.2	13.3	25.0
WACO	**	26	387	145	37.4	25.0	6.7	26.6
MSK	M18	9	20235	8596	42.5	537.5	216.7	40.3

TABLE 2 - 5

GENERAL AVIATION ANNUAL HOURS BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987

ESTIMATE OF TOTAL Hours	SIZE	
		TOTAL HOURS
ERROR	•	OF TOTAL HOURS
	OF TOTAL HOURS	

TABLE 2 - 6

GENERAL AVIATION ACTIVE AIRCRAFT By TYPE OF AIRCRAFT 1987

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	87809	63533	754	1.2	72.4	6 .0
1 ENG: 4+ SEATS	121486	107502	673	9 .0	88.5	9.0
1 ENGINE: TOTAL	209295	171035	1011	9.0	81.7	0.5
2 ENG: 1-6 SEATS	18196	15741	260	1.7	86.5	4.1
2 ENG: 7+ SEATS	9161	7566	155	2.0	82.6	1.7
2 ENGINE: TOTAL	27357	23307	303	1.3	85.2	1.1
PISTON: OTHER	322	112	28	24.6	34.9	9 .
PISTON: TOTAL	236974	194455	1055	o . sr	82.1	4.0
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4775	4337	92	2.1	8.08	6 . 1
2 ENG: 13+ SEATS	846	723	31	€.4	85.4	3.7
2 ENGINE: TOTAL	5621	2060	26	6.	0.08	1.7
TURBOPROP: OTHER	250	214	19	0.6	85.8	7.7
TURBOPROP: TOTAL	5871	5274	66	6 . 1	8.68	1.7

TABLE 2 - 6

		PERCENT
RCRAFT		
TIVE AI	CKAP 1	STANDARD
GENERAL AVIATION ACTIVE AIRCRAFT BY	TYPE OF AIRCRAFI 1987	STA
RAL AVI	<u>-</u>	Ā
GENE		ESTIMATE
		ATION
		LATION

ESTIMATE STANDARD OF ERROR PERCENT ACTIVE		1.5	66.0 3.4	4.1	82.4 0.4		50.6 2.5	78.6 3.3	63.1 2.0	69.7 2.3	81.2 0.4
PERCENT STANDARD ERROR		9.1	č.	1.5	0.5		s. o	4.2	3.2	4 .	0.5
STANDARD ERROR		63	22	67	1062		140	147	203	228	1105
ESTIMATE OF ACTIVE AIRCRAFT		3900	438	4338	204067		2813	3520	6333	6783	217183
POPULATION Size		4126	663	4789	247634		5555	4479	10034	9732	267400
AIRCRAFT TYPE	FIXED WING - TURBOJET	2 ENGINE TURBOJET	TURBOJET: OTHER	TURBOJET: TOTAL	FIXED WING: TOTAL	ROTORCRAFT	PISTON	TURBINE	ROTORCRAFT: TOTAL	OTHER	TOTAL

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT 1987

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	2971	355	2418	318	4.18	14.5
ALASKA	9225	552	7496	485	81.3	7.2
ARIZONA	6722	524	5085	460	75.6	0.0
ARKANSAS	3070	357	2724	332	88.7	14.9
CALIFORNIA	37803	1165	30982	1049	82.0	8. 8.
COLORADO	5196	466	4374	426	84.2	11.1
CONNECTICUT	2317	315	2016	294	87.0	17.4
DELAWARE	1103	218	827	185	75.0	22.4
DIST. OF COLUMBIA	57	42	37	32	65.0	4.77
FLORIDA	15797	790	13614	727	86.2	6.3
GEORGIA	5931	501	4789	447	80.8	10.2
HAWAII	725	169	486	140	67.0	24.9
IDAHO	2634	339	2062	294	78.3	15.0
ILLINDIS	9303	622	7688	559	82.6	8.2
INDIANA	4921	460	4098	4 15	83.3	11.5
IOWA	3417	379	2910	351	85.1	13.9
KANSAS	4912	455	3827	397	9.77	10.8
KENTUCKY	2021	289	1615	265	9.62	17.4
LOUISIANA	3982	412	3327	372	83.6	12.7
MAINE	1610	262	1301	233	80.8	19.6
MARYLAND	3416	384	2860	336	9.77	13.2

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT 1987

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARE
MASSACHUSETTS	4011	415	3413	379	85.1	12.9
MICHIGAN	8958	610	7160	538	79.9	89
MINNESOTA	8008	500	4959	447	81.7	10.0
MISSISSIPPI	2478	325	2049	293	82.7	16.0
MISSOURI	5484	480	4358	425	79.5	4.0
MONTANA	2521	338	2154	307	8 5 .5	16.8
NEBRASKA	2685	342	2126	297	79.2	15.0
NEVADA	2295	305	1817	272	79.2	15.8
NEW HAMPSHIRE	1591	261	1338	237	84.1	20.3
NEW JERSEY	4759	445	3899	400	81.9	4.4
NEW MEXICO	2661	340	2121	296	79.7	15.1
NEW YORK	7887	564	6431	503	81.5	8 9.
NORTH CAROLINA	5692	491	4944	453	86.9	10.9
NORTH DAKOTA	1888	292	1353	243	71.7	17.0
ОНІО	9446	627	7850	268	83.1	8.2
OKLAHOMA	4922	459	3827	398	77.8	10.9
OREGON	5553	487	4254	421	76.6	10.1
PENNSYLVANIA	7511	543	5970	485	79.5	8 9.
RHODE ISLAND	430	140	389	133	80.5	42.7
SOUTH CAROLINA	2252	314	1782	7.7.2	79.1	16.5
SOUTH DAKOTA	1503	256	1154	218	76.8	19.5

TABLE 2 - 7

GENERAL AVIATION ACTIVE AIRCRAFT
BY
STATE OF BASED AIRCRAFT
1987

PAGE 3 OF 3

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
TENNESSEE	3814	409	3062	361	80.3	12.8
TEXAS	23190	945	18358	836	79.2	₩.
ИТАН	1417	248	1070	210	75.5	49.9
VERMONT	731	171	654	161	80.	30.3
VIRGINIA	3896	403	3205	362	82.3	12.6
WASHINGTON	7919	568	6232	502	78.7	æ 10:
WEST VIRGINIA	1219	237	1046	218	85.8	24.5
WISCONSIN	5568	481	4361	423	78.3	10.2
WYOMING	1135	225	1035	212	91.2	28.0
PUERTO RICO	503	140	338	121	67.2	30.4
OTHER U.S. TERRITORIES	178	80	136	75	77.3	55.0
TOTAL	267400		217183	1105	81.2	♥.0

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

TABLE 2 - 8

GENERAL AVIATION ACTIVE AIRCRAFT
BY
REGION OF BASED AIRCRAFT
1987

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT IN ALL REGIONS BY AIRCRAFT TYPE AND PRIMARY USE 1987

	IN- ACTIVE	24276	13984	38260	2455	1595	4050	210	42519
	OTHER	1784	922 21.4	2707 12.2	371 29.8	553 18.8	925 16. 4	35 9.1.9	366 9 9 9
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AIR TAXI	00.	1537 16.3	1537 16.3	1112	1377	2489 11.6	23 45 .7	4050 9 . 4
1	COMMUTER CARRIER	ペ *	309 29.2	311	- *	377	387 30.7	00	698 21.4
1	OTHER WORK	468 26.2	564 28.4	1032 19 . 6	ო *	4 *	7.	00	1109 18.8
	AERIAL OBS	1206 18 . 1	2052 14.6	3259	99 *	269 23.6	336 23.2	00.	3594 10. 5
ACTIVE USE	AERIAL APPL	5474 2.9	♥	5558 3.1	ਚ ਲ *	4 *	78 46.7	45 2.9	5682 3.1
ACT	INSTRUC- TIONAL	8279 6.4	57.78 4.73.6 4.00.0	14032 5.2	612 20.7	6 *	713 20.1	m *	14749 5.0
	PER- SONAL	44110 1.5	67890 1.5	112000	4 776 7.0	931	5706 6.5	w *	117712
	BUSI- NESS	2150 12.5	27002 3.3	29152 3.2	7077 5.2	2226 10.6	9303 4.7	00	38455
	EXECU- TIVE	9 *	1387 17.2	1448 16.7	1677	1615 12.2	3292 9 . 2	00.	4740 8 . 2
	TOTAL ACTIVE	- PISTON I SEATS VE 63533 VE 1.2 VE 72.4	ATS 107502 0.6 88.5	TOTAL VE 171035 IR 0.6 VE 81.7	15741 1.7 1.7 86.5	ATS 7566 2.0 82.6	TOTAL VE 23307 R 1.3 VE 85.2	OTHER 112 112 24.6 1 34.9	TOTAL F 194455 T 0.5 F 82.1
AIRCRAFT TYPE		FIXED WING FIXED WING - PIST 1 ENG: 1-3 SEATS EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE	1 ENG: 4+ SEATS EST.NO.ACTIVE 1 % STD. ERROR EST. % ACTIVE	1 ENGINE: TO EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE	2 ENG: 1-6 SEATS EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE	2 ENG: 7+ SEATS EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE	2 ENGINE: TO EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE	PISTON: OT EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE	PISTON: TO EST.NO.ACTIVE % STD. ERROR EST. % ACTIVE

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AIRCRAFT IN ALL REGIONS BY AIRCRAFT TYPE AND PRIMARY USE 1987

AIRCRAFT TYPE					ACT	ACTIVE USE						
TO	TOTAL ACTIVE	EXECU- TIVE	BUSI-	PER-SONAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER	COMMUTER	AIR	OTHER	IN- ACTIVE
FIXED WING - TURBOPROP	ROP											
ACTIVE	4337	2997	463	141	15	-	o	٥	60	371	230	438
	2.1	7.4	20.1	4 . 4	i *		0	0	30.0	22.5	30.8	
ACTIVE	8.06						•		•			
2 ENG: 13+ SEATS												
VE	723	250	4	-	7	0	27	7	204	75	105	123
	4 .3	11.5	40.0	*	*	0.0	44.2	*	17.0	33.6	28.5	
EST. % ACTIVE 8	15.4											
2 ENGINE: TOTAL												
IVE	5060	3247	504	142	57	-	27	14	287	446	335	561
	1 .9	4 .5	18.8	41.2	*	*	44.2	*	14.9	19.5	23.0	
ACTIVE	90.0											
TURBOPROP: OTHER												
VE	214	9	0	8	0	76	28	0	7	38	49	36
	0.6	*	o. 0	*	0.0	o. O	*	o 0	*	36.0	46.7	
ACTIVE	85.8											
TURBOPROP: TOTAL												
	5274	3253	504	144	57	77	52	4	301	485	384	597
	9.	4 . 5	18.8	4 0.9	*	4.4	44.3	*	15.2	18.2	21.0	
EST. % ACTIVE 8	89.8											
FIXED WING - TURBOJET	ET											
2 ENGINE TURBOJET	0000	9	***	đ	•	ć	u	c	a	376	246	800
	3 6	2 T	23.8	*	· *	0	۱ *	0	*	7.61	26.0	2
ш	94.5))) ;		: :)	
TURBOJET: OTHER												
ш	438	205	42	30	80	0	0	-	0	0	152	225
% STD. ERROR EST. % ACTIVE 6	5.1	10.7	35.4	29.7	*	0.0	0.0	*	0.0	0.0	13.1	
į) !											
TURBOJET: TOTAL	4338	3123	365	6 C	26	0	LC	-	CO	375	398	451
	7.5	8. 8.	21.5	43.1	+	0.0	*	*	*	19.7	18.6	
EST. % ACTIVE 9	9.0											

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 9

GENERAL AVIATION AIRCRAFT IN ALL REGIONS BY AIRCRAFT TYPE AND PRIMARY USE 1987

PAGE 3 OF 3

TOTAL E	BUSI -	PER-	ACTI	ACTIVE USE	AERIAL	OTHER	COMMUTER	AIR	OTHER	-NI
			TIONAL	APPL	0 B S	WORK	CARRIER	TAXI		ACTIVE
3.9 2.7	=	17895 1 . 1	14831 5.0	5760 3.0	3654 4.01	1125 18 . 5	1005 15.6	4909 4 . 1	444 8 . 8	43567
17 273 * 16.9		631	296 22.3	523 15.9	489 17.5	137 31.5	00.	* p3	424 19.0	2742
724 225 17.8 39.6	•	203 13.3	£ *	233 39.7	358 35.7	84 40.6	6	1296 14.3	369 27.4	G1 G3
740 498 17.4 20.2	-	835 .3	314 21.4	756 16.4	847 18.2	22.1 24.9	о , *	1319	793 16.3	3701
104 121	4	4758 4.0	582 16.3	00.	357 25.0	232 30.5	0 O	0.0	630 21.7	2949
11960 39943 3.8 2.6	123	23487 1.0	15727 4 . 8	6516 3.3	24 80 80 80 80	1577	101 15.81	6 228 7.1	5873 7.2	50217

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. ROW SUMMATIONS MAY DIFFER FROM PRINTED TOTALS BECAUSE SOME ACTIVE AIRCRAFT DID NOT REPORT USE.

TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT IFR FLOWN AND TRANSPONDER EQUIPPED 1987

ESTIMATED PERCENT OF IFR WITH TRANSPONDER			93.1	98.7	98.3	88.3	99.7	4.00	100.0	98.6		88.3	100.0	4 .66	86.4	0.88
PERCENT STANDARD ERROR			11.9	2.3	2.3	2.3	2.4	1.7	38.4	1.7		1.1	2.5	1.0	15.8	1.1
EST. NUMBER FLOWN IFR WITH TRANSPONDER			3926	50393	54319	14589	7480	22069	87	76475		4671	796	5467	140	5607
TOTAL HRS FLOWN IFR AS % OF ALL HOURS			1.2	16 .5	10.6	46.9	52.9	49.7	42.3	17.71		97.6	85.3	7.06	48.3	87.1
PERCENT STANDARD ERROR			11.2	2.2	2.2	2.2	2.3	1.6	38.4	1.3		6.0	2.5	6.0	0.6	1.0
TOTAL HOURS FLOWN IFR			106751	2238220	2344971	1235378	1189820	2425199	6455	4776626		1372656	435429	1808085	88560	1896645
ESTIMATED PERCENT ACTIVE FLOWN IFR			9.9	47.5	32.3	93.3	99.2	95.2	7.77	39.9		100.0	100.0	100.0	75.6	100.0
PERCENT STANDARD ERROR			11.2	2.2	2.2	2.2	2.3	1.7	38.4	1.7		6.0	2.5	6.0	O. 69	6 .0
ESTIMATED NUMBER AIRCRAFT FLOWN IFR			4219	51034	55253	14689	7502	22191	87	77532		4705	796	5501	162	5663
т түре		PISTON	SEATS	SEATS	TOTAL	SEATS	SEATS	TOTAL	OTHER	TOTAL	TURBOPROP	SEATS	SEATS	TOTAL	OTHER	TOTAL
AIRCRAFT TYPE	FIXED WING	FIXED WING - PISTON	1 ENG: 1-3 SEATS	1 ENG: 4+	1 ENGINE:	2 ENG: 1-6 SEATS	2 ENG: 7+	2 ENGINE:	PISTON:	PISTON:	FIXED WING - TURBOPROP	2 ENG: 1-12 SEATS	2 ENG: 13+	2 ENGINE:	TURBOPROP:	TURBOPROP:

TABLE 2 - 10

GENERAL AVIATION ACTIVE AIRCRAFT IFR FLOWN AND TRANSPONDER EQUIPPED 1987

AIRCRAFT TYPE	ESTIMATED NUMBER AIRCRAFT FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT ACTIVE FLOWN IFR	TOTAL HOURS FLOWN IFR	PERCENT STANDARD ERROR	TOTAL HRS FLOWN IFR AS % OF ALL HOURS	EST. NUMBER FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING - TURBOJET									
2 ENGINE TURBGJET	4106	4.0	100.0	1312203	4.0	92.4	4 105	4.0	100.0
TURBOJET: OTHER	542	. s	100.0	138598	13.	100.0	546	3.5	100.0
TURBOJET: TOTAL	4649	0 .sr	100.0	1450801	0 .s	95.0	4652	O . S	100.0
FIXED WING: TOTAL	87844	7. 10.	43.0	8124072	80.0	26.4	86734	.	98.7
ROTORCRAFT									
PISTON	112	58.1	4 .0	24611	58.1	89	110	63.3	98.6
TURBINE	501	12.0	14.2	29238	12.0	1.8	501	12.0	100.0
ROTORCRAFT: TOTAL	612	14.4	9.7	53849	27.3	2.4	611	15.0	8.66
OTHER	12	147.6	0.2	262	147.6	0.1	ហ	226.1	44.6
TOTAL	88468	t.	40.7	8178183	8.	24.5	87350	2 .5	98.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1987
PAGE 1 OF 18

MANUFACTURER/ Model Group	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
OTHER 1	16253	9683	445	4.6	59.6	2.7
OTHER 2	1698	1293	8	6.3	76.1	4.
OTHER 3	318	163	28	17.4	51.2	σ. σ.
OTHER 4	186	121	30	24.4	65.0	15.9
OTHER 5	162	65	26	40.0	40.3	16.1
OTHER 6	311	265	21	7.9	85.2	6.7
OTHER 7	234	201	61	₹.	85.8	8.1
OTHER 8	127	9.	91	21. 3	72.0	15.2
OTHER 9	572	515	40	7.7	90.0	6.9
OTHER 10	268	189	12	6.3	70.6	4.4
OTHER 11	1884	728	89	Q	38.7	3.6
OTHER 12	317	160	45	28.0	50.6	14.2
OTHER 13	3205	2160	167	7.7	67.4	5.2
ADAMS A50S	132	113	र्घ	13.2	85.6	11.3
AERORSJ2	40	12	ო	24.4	30.6	7.5
AEROSPAS355	138	118	23	19.7	85.7	16.9
AEROSPSA316	92	11	28	170.4	18.0	30.7
AGUSTA205	36	16	5	63.1	43.8	27.6
AGUSTAA 109	42	38	4	Ø.	6.68	89.
AIRPTSA	225	88	18	20.5	38.9	8.0
AIRSPC18	23	12	ო	26.8	50.0	13.4

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GENERAL AVIATION ACTIVE AIRCRAFT
MANUFACTURER/MODEL GROUP
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MANUFACTURER/ MODEL GROUP	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AIRTRCAT300	440	422	20	4.	96.0	4 .
AIRTRCAT400	6	8	7	12.3	94.9	11.6
AMD FALCTO	133	131	4	3.0	88.9	2.9
AMD FALC20	199	177	18	10.3	89.1	9.2
AMD FALCSO	15	115	0	0.0	100.0	0.0
AMTR TMK	21	0	0	0.0	0.0	0.0
ARCRNEH37	45	0	0	0.0	0.0	0.0
ARCTICS1A	\$ 6	38	ω	16.0	40.2	4.0
ARCT I CS 181	24	12	ო	21.4	51.6	11.0
ARONCA 15	206	107	30	28.3	52.0	14.7
ARONCA58	147	26	4	25.7	38.0	89.
ARONCA65	151	06	19	21.2	59 .	12.7
ARONCAC3	9	16	ო	16.1	27.1	4.
AVIANWFALCON	27	21	ស	24.6	77.8	19.1
AVI ANWSKYHWK	43	30	Ø	21.3	68.7	14.7
AYRES S2	823	737	52	7.1	89.68	6
BAC 111	20	20	0	0.0	100.0	0.0
BAG B206	26	19	ın	26.9	71.4	19.2
BAG DH125	69	69	0	0.0	100.0	0.0
BALWKSFIREFY	1602	1101	86	6.8	68.7	6.1
BBAVIA11	833	490	89	13.8	58.8	8.1

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1987
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MANUFACTURER/ MODEL GROUP	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BBAVIA7	3529	2475	151	.	70.1	₩.
BBAVIA8	229	206	12	გე დ.	90.1	5.3
BEECH 100	247	247	0	0.0	100.0	0.0
BEECH 17	207	88	18	20.6	42.6	60
BEECH 18	819	387	90	15.4	47.3	7.3
BEECH 1900	28	26	ო	10.5	92.3	9.7
BEECH 200	840	717	54	7.6	85.3	6 0
BEECH 23	2782	2551	84	3.3	91.7	3.0
BEECH 300	94	94	0	0.0	100.0	0.0
BEECH 33	1808	1705	26	ю	94.3	3.1
BEECH 35	6843	6083	181	0°.	88.9	2.6
BEECH 36	2283	2271	21	6 .0	89.2	6.0
BEECH 45	287	191	32	16.9	66.7	11.3
BEECH 50	317	199	40	20.2	62.8	12.7
BEECH 55	2239	2085	73	ຜ ທ	93.1	3.3
BEECH 56	19	43	w	11.8	70.7	80
BEECH 58	1516	1456	4	щ Ф.	96.1	3.2
BEECH 60	434	410	27	Ø	94.5	6.
BEECH 65	122	16	25	27.7	74.9	20.8
BEECH 76	300	298	Ø	1 .9	4 .86	1 .9
BEECH 77	243	241	ග	2.0	99.3	2.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP PAGE 4 OF 18

MANUFACTURER/ Model Group	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	ST ANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 80	162	86	22	22.7	60.6	13.8
BEECH 90	1126	1038	51	4 .9	92.2	₹
BEECH 95	464	404	41	10.1	87.1	60
BEECH 99	16	82	Ξ	13.6	8.8	12.2
BELL 204	188	88	32	36.4	47.6	17.3
BELL 206	1936	1723	106	6.1	89.0	5.5
BELL 212	9	74	23	31.7	73.6	23.3
BELL 222	80	79	4	4.7	98.4	4.7
BELL 412	49	49	0	0.0	100.0	0.0
BELL 47	1299	778	95	12.2	59.9	7.3
BLANCA 1 1	32	46	9	13.2	56.3	7.4
BLANCA1413	264	135	8	43.0	51.2	22.0
BLANCA1419	271	159	33	20.9	58.8	12.3
BLANCA 17	1041	957	57	9	92.0	ru ru
BLANCA?	2356	1993	86	4 . 9	84.6	4.2
BLANCAS	472	446	21	4.7	4.46	4.
BNORM BN2	76	99	9	15.4	86.7	13.4
BOE ING707	48	ო	7	282.7	5 0	14.9
BOE ING727	36	36	0	0.0	100.0	0.0
BOE ING75	1910	938	103	11.0	49.1	3 . A
BOLKMS105	112	112	•	0.0	100.0	0.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
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	!					
MANUFACTURER/	SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BOLKMS117	53	53	0	0.0	100.0	0.0
BRAERODH125	70	99	ω	10.6	85.2	1.6
BRASOVIS28	84	စွ	Ø	20.8	62.9	13.1
BRWSTRFLEET2	28	12	က	24.1	41.8	10.1
BRWSTRFLEET7	23	12	8	18.9	52.6	10.0
BUKER 131	32	11	4	22.0	53.6	1.8
CAMRONMODELO	237	183	22	12.2	77.3	9 .
CASA C212	37	13	Ø	42.5	35.6	15.1
CESSNA120	872	619	29	8.7	9.77	8.
CESSNA 140	2378	1576	06	5.7	66.3	8
CESSNA150	19255	17397	297	1.7	90.3	÷.
CESSNA170	2462	2088	107	5. 1.	8.4.8	€.3
CESSNA172	25158	23061	324	4.4	91.7	±.3
CESSNA175	1299	1018	9	ى ق	78.3	4.6
CESSNA177	2874	2671	82	₩. +	92.9	2.9
CESSNA 180	2691	2290	128	.6 .6	85.1	4.
CESSNA182	13921	13264	174	. .	95.3	1.2
CESSNA 185	1573	1438	46	3.2	91.4	2.9
CESSNA188	1653	1380	102	7.4	83 .s	6.2
CESSNA 190	88	65	w	e.	74.3	6. 6.
CESSNA195	502	351	33	4.0	69.8	9

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
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MANUFACTURER/ Model Group	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA205	242	230	20	80.	95.0	æ
CESSNA206	2796	2520	66	9. E	1.06	89
CESSNA207	346	346	0	0.0	100.0	0.0
CESSNA208	47	47	0	0.0	100.0	0.0
CESSNA210	6130	5509	173	3. +	89.9	2.8
CESSNA303	183	181	ហ	2.6	98.7	2.6
CESSNA305	274	208	6	6 9.	75.9	8 9
CESSNA310	3101	2652	123	4 .6	85.5	4.0
CESSNA320	313	241	20	α .υ	17.1	.
CESSNA335	45	45	0	0.0	100.0	0.0
CESSNA336	7.7	45	Ø	13.7	58.4	8.0
CESSNA337	1180	365	76	7.9	81.7	.
CESSNA340	922	914	17		1.66	1 .
CESSNA401	215	186	21	11.4	86.4	6.6
CESSNA402	565	480	9	13.5	85.0	11.5
CESSNA404	135	125	24	. 55 . 55	97.6	18.0
CESSNA411	141	75	91	20.7	53.0	11.0
CESSNA414	171	756	25	3.3	0.86	3.2
CESSNA421	1243	1086	72	9	88.2	δ. 89.
CESSNA425	185	185	0	0.0	100.0	0.0
CESSNA441	234	234	0	0.0	100.0	0.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
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MANUI	MANUFACTURER/ Model Group	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSA	CESSNA500	818	618	0	0.0	100.0	0.0
CESSNA501	4A501	42	42	0	0.0	100.0	0.0
CESS	CESSNA650	1117	117	0	0.0	100.0	0.0
CESSNAT50	4A750	65	=	7	62.8	17.1	10.7
CESSA	CESSNAUC94	35	on.	м	28.1	27.1	7.6
CHILD S1	5.51	23	26	ИĐ	9 .0	95.0	89 .03
CHILD S2	28.0	174	168	Ø	5.5	96.7	Б. 3
CNDA	CNDAIRCLEGO	97	06	on	7.6	92.4	Ø.
CNTRAR 101	4R101	32	28	ო	10.7	87.5	4.0
COMMI	COMWTH185	113	29	80	26.7	25.7	6 . 9
CONAERLA4	ERLA4	481	456	26	5.7	9. 46 8. 40	æ.
CURT	CURT I SC46	23	0	o	0.0	0.0	0.0
CURTISUR	ISUR	26	ო	ო	74.0	13.3	69. 69.
CURT	CURTISROBIN	37	က	ო	102.0	7.4	7.6
CURT1	CURTISTRVAIR	191	8	Ø	18.4	25.2	4.6
CVAC	CVAC 240	38	13	ω	58.9	35.3	20.8
CVAC	CVAC BT13	114	32	=	34.5	27.9	Ø.
CVAC	STC580	43	32	=	32.8	75.0	24.6
DART	U	26	ហ	ო	51.5	20.0	10.3
DHAV	DHC1	8	78	6	13.3	77.6	10.3
DHAV	DHAV DHC2	250	212	35	16.3	84.8	13.8

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
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MANUFACTURER/ MODEL GROUP	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
DHAV DHC3	40	9	•	0.0	100.0	0.0
DHAV DHC4	25	25	0	0.0	100.0	0.0
DHAV DHC6	88	72	=	15.1	80.6	12.2
DHAVXXDH82	8	48	9	20.8	56.0	11.7
DOUG A26	31	60	ហ	55.7	27.3	15.2
DOUG DC3	347	201	27	13.5	58.0	7.8
DOUG DC4	70	61	ဖ	31.6	27.1	න ග
DOUG DC6	88	0	0	0.0	0.0	0.0
DOUG DC7	32	28	ω	22.9	87.5	20.1
DOUG DC8	52	7	č.	215.7	12.6	27.2
DOUG DC9	7.1	7.1	•	0.0	100.0	0.0
EAGLE DW	76	88	Ξ	20.7	72.7	15.0
EAGLEBC7	99	64	м	5.2	97.7	5. 1
E I RVONZO	114	109	4	ສ ເ	95. 65.	3.4
EMAIR MA1	22	0	•	0.0	0.0	0.0
EMB 110	4	43	Ŋ	12.8	95.7	12.2
ENSTRMF28	442	318	27	∞ ∙.	72.0	6.1
FLEET 16B	24	41	ო	20.4	57.1	11.6
FRCHLD24	294	45	21	46.1	15.2	7.0
FRCHI DC119	29	0	0	0.0	0.0	0.0
FRCHLDM62	240	111	51	13.3	46.1	6.

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
GENBALAX6	92	υ 6	01	16.2	90.5	9.41
GLASFL201	32	28	4	15.9	79.2	12.6
GLASFLH301	113	108	ហ	4.	95.9	4.6
GROB 103CAT	S	53	7	3.7	96.1	3.5
GROB 109	69	n O	ស	80 T.	85.0	6.9
GROB ASTIR	09	57	ო	4 .	95.2	4.7
GRTLKS2T1	181	146	15	10.6	80.5	80
GRUMANSA 16	20	4	8	54.6	18.7	10.2
GRUMAVAA1	563	200	20	4.1	88.8	3.6
GRUMAVAAS	1050	1049	7	0.7	6.66	0.7
GRUMAVG1159	38	37	8	ru eo	95.0	5.5
GRUMAVG164	1180	898	100	10.4	82.0	œ 10
GRUMAVG21	46	22	13	60.0	48.3	28.9
GRUMAVTBM	39	13	4	32.6	34.1	11.1
GULSTM112	688	632	45	7.0	91.9	6 0
GULSTM500	290	240	22	9.2	82.7	7.6
GULSTM520	90	0	œ	78.6	20.0	15.7
GULSTM560	113	75	19	24.7	66.7	16.5
GULSTM680	316	210	48	23.0	66.5	15.3
GULSTM680TP	8	26	12	21.9	62.7	13.7
GULSTM690TC	27	27	0	0.0	100.0	0.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
GULSTM690TP	438	430	16	3.7	98.1	3.6
GUL STIMAA 1	587	412	90	14.4	10.1	10.1
GULSTMAAS	649	583	26	4. RJ	89.9	4.0
GULSTMG1159	166	156	#	7.1	94.2	6.7
GULSTMG159	. 116	96	13	13.6	81.1	11.0
GULSTMG44	75	47	12	24.6	62.7	15.4
GULSTMG73	25	Ξ	8	22.6	4. 3. s	80 61
GULSTMGA7	56	26	0	0.0	100.0	0.0
H23/HTE	38	26	7	26.5	66.5	17.6
H34/55	30	8	4	261.2	5 6	14.5
HELIO H295	105	06	12	13.9	85.4	11.9
HELIO H391	23	က	М	59.3	14.3	α Ω
HILLERFH1100	99	4	12	30.3	62.5	18.9
HILLERUH12	564	224	47	20.9	39.7	89
HUGHES269	703	454	44	89.	64.6	හ ග
HUGHES369	634	4	65	14.9	69.5	10.3
HWKSLYDH104	33	∢	ហ	111.9	12.5	14.0
HWKSLYDH125	192	183	13	7.2	95.3	6
HYNES B2	128	36	17	48.7	27.8	13.5
INTRCP200	33	32	8	7.5	95.8	7.2
ISRAEL1121	101	87	Ξ	12.2	85.7	10.5

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
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MANUFACTURER/ Model Group	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ISRAEL1123	25	25	0	0.0	100.0	0.0
ISRAEL1124	205	205	•	0.0	100.0	0.0
JBMSTRDGA 15	. 4	34	7	21.7	40.0	8.7
LAIKFN10	37	0	0	0.0	0.0	0.0
LEAR 23	52	42	o	20.8	17.1	16.1
LEAR 24	180	117	33	28.6	65.0	18.6
LEAR 25	255	247	13	ъ.	96.8	4.
LEAR 35	420	420	0	0.0	100.0	0.0
LEAR 55	97	97	0	0.0	100.0	0.0
LET L13	156	124	2	6 0	9.62	2.4
LKHEED12A	20	60	ო	42.2	39.5	16.7
LKHEED1329	46	26	α,	හ ග	86.2	80
LKHEED18	S S	19	15	79.5	33.3	26.5
LKHEEDP2V	24	0	0	0.0	0.0	0.0
LKHEEDPV1	35	=	7	65.7	31.8	20.9
LKHEEDT33	47	7	ហ	68.7	15.0	10.3
LUSCOM8	2173	1254	141	11.3	57.5	6.5
MARTIN404	23	8	က	148.0	7.7	11.4
MAULE M4	275	222	23	10.3	80.6	ж ж
MAULE MS	456	408	18	4.	4.68	в. В
MAULE MG	76	65	4	ιυ ∞	85.3	4 .

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MCLISHFUNKB	143	72	5	14.6	50.3	7.3
MEYERSOTW	5	19	4	23.9	36.4	8.7
MNCOUPSO	89	20	4	21.2	29.8	6.3
MMMITEM 18	148	72	12	16.9	48.4	8.2
MOONEYM20	6378	5653	168	3.0	88.6	2.6
MRCHTIS205	45	29	ហ	17.4	63.7	11.1
MTSBSIMU2	322	203	4	20.3	63.1	12.8
MTSBSIMU300	75	75	0	0.0	100.0	0.0
MULTECD16	38	21	ហ	24.6	56.2	13.8
NAMER 825	ຄສ	22	7	32.3	41.6	13.4
NAMER F51	145	Ξ	Ξ	80 60	76.3	7.5
NAMER NA260	163	64	19	30.0	39.4	11.8
NAMER TG	577	208	5.4	10.6	88.0	හ _.
NATBAL752	32	31	2	13.	6 6	6.2
NAVAL N3N	131	36	Ξ	31.4	27.5	છ જ
NAVIONNAVION	576	338	55	16.2	58.6	ທ _ີ
NORD 3202	27	18	7	37.7	66.7	25.1
NORD SV4	45	20	9	28.1	44.4	12.5
NORWST65	52	16	មា	30.0	28.6	හ හ
ORLHELH19	73	σ	10	109.8	12.5	13.7
ORLHELS58	32	19	7	37.3	55.6	20.7

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP 1987 PAGE 13 OF 18

MANUFACTURER/ Model Group	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF Percent Active	STANDARD ERROR
PARTENP68	40	40	0	0.0	100.0	0.0
PICARDAX6	150	26	on.	35.3	17.2	6.1
PILATS84	26	25	-	₹.	95.2	4.6
PIPER 600	393	393	0	0.0	100.0	0.0
PIPER E2	20	8	-	68.1	න භ	5.7
PIPER J2	63	22	ın	24.1	35.6	8.6
PIPER J3	4258	2158	205	8. 8.	50.7	4.8
PIPER J4	251	112	5	13.9	44.8	6.2
PIPER JS	352	177	23	12.9	50.2	
PIPER PA12	1366	925	81	89 89	67.7	œ.
PIPER PA14	107	64	Ø	∞ •	8.89	ν. æ
PIPER PA15	190	115	49	16.4	60.3	<i>o</i> .
PIPER PA16	366	193	50	26.0	52.8	13.7
PIPER PA17	113	61	7	11.2	53.6	6.0
PIPER PA18	3598	2701	189	7.0	75.1	5.2
PIPER PA20	454	291	39	3.4	64.0	න ග
PIPER PA22	4806	2909	214	4.7	60.5	4.
PIPER PA23	3332	2755	155	8. 8.	82.7	4.7
PIPER PA24	3207	2757	127	4 . 6	86.0	4.0
PIPER PA25	1208	1065	69	13	88.2	5.7
PIPER PA28	22324	20575	281	1.4	92.2	1.3

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MANUFACTURER/ MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER PA30	1241	1121	19	S. 5	80.3	4.
PIPER PA31	1889	1768	67	3.8	93.6	3.5
PIPER PA31T	543	536	1 3	. S	8.88	2.5
PIPER PA32	4365	4174	68	2.1	93.6	2.0
PIPER PA34	1970	1918	Sign (2.6	97.4	2.5
PIPER PA36	363	302	35	10.7	83.3	6. 8
PIPER PA38	1421	1300	64	4.00	91.5	æ. 4
PIPER PA42	113	113	•	0.0	100.0	0.0
PIPER PA44	330	321	5	ж. т.	4.70	3.0
PIPER PA46	274	274	•	0.0	100.0	0.0
PROPUT200	11	65	w	αο αο	8.08	8.0
RAVEN RX6	207	83	9	81.8	45.2	14.3
RAVEN S50	86	21	Ø	27.7	24.6	8. 9
RAVEN S55	811	533	87	16.3	65.7	10.7
RAVEN SGO	223	219	o	4.2	98.0	4.
RAVEN SGG	94	38	Ø	. 5 5	80.6	12.5
RKWELL500	34	34	•	0.0	100.0	0.0
RKWELL700	25	24	m	12.0	84.6	10.2
RKWELLNA265	308	299	Ξ	დ დ	97.1	3.7
ROBSINR22	243	221	8	8.2	91.1	7.5
ROLSCHLS	102	102	0	0.0	100.0	0.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1987
PAGE 15 OF 18

MANUFACTURER/ MODEL GROUP	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
RYAN ST3	168	69	î,	16.4	55. 1	6
RYAN STA	34	48	4	24.0	51.6	12.4
SAAB SF340	12	12	0	0.0	100.0	0.0
SCHLERASK21	35	35	0	0.0	100.0	0.0
SCHLERASW15	35	32	8	6.2	91.3	ω Θ
SCHLERASW19	99	37	7	19.8	63.4	12.6
SCHLERASW20	94	19	65	11.4	83.6	6
SCHLERK8	23	12	8	20.7	50.0	10.4
SCHLERKAB	74	48	co	17.2	65.4	11.3
SCWZERG164	219	151	32	20.9	0.69	14.4
SCWZERSG1	758	499	ស	11.0	65.8	7.2
SCWZERSG2	572	401	36	6	10.1	0
SEMCO MODELT	27	8	~	111.8	7.7	6 0
SKRSKYS55	28	9	Ø	38.8	56.2	21.8
SKRSKYS58	69	30	12	40.4	43.3	17.5
SKRSKYS58T	31	49	G	28.1	62.5	17.6
SKRSKYS61	29	£	ហ	39.4	46.2	18.2
SKRSKYS76	164	137	17	12.6	83.8	. O. sr
SLINDS 100	301	233	27	11.5	77.4	GS SO
SMITH 600	366	338	28	æ 4.	92.5	7.8
SNIAS 350	226	218	#	60 FU	9.98	8.2

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1987
PAGE 16 OF 18

MANUFACTURER/	GROUP	ESTIMATE	STANDARD	PERCENT	ESTIMATE	STANDARD
MODEL GROUP	SIZE	OF ACTIVE AIRCRAFT	ERROR	STANDARD ERROR	OF PERCENT ACTIVE	ERROR
SNIAS SA318	21	0	0	0.0	0.0	0.0
SNIAS SA341	36	32	က	10.8	88.2	n on
SOCATAMS894	6 6	34	က	0.6	88	7.9
SOCATARALLYE	22	51	က	20.1	66.7	13.4
SOCATATB10	45	38	G	36.6	57.1	20.9
SOCATATB20	82	82	0	0.0	100.0	0.0
SPHRTHCIRRUS	97	62	=	18.2	64.1	11.7
SPHRTHNIMBUS	12	47	М	6.5	93.0	6.1
SPHRTHVENTUS	45	45	0	0.0	100.0	0.0
STBROSSD3	50	20	0	0.0	100.0	0.0
STNSON10	161	45	12	27.3	27.7	7.6
STNSONL5	125	63	5	15.7	50.6	6.7
STNSONSR9	38	ហ	8	32.8	18.2	9 .0
STNS0NV77	103	38	7	18.0	37.3	6.7
STOLAMRC3	223	7.7	13	16.9	34.3	RQ 80
SUPAC LA	66	27	Ø	22.5	27.3	6.1
SUPAC V	31	x 0	ın	80.6	25.0	15.2
SWRNGNSA226	142	139	ហ	æ. €.	97.8	ю
SWRNGNSA227	74	74	0	0.0	100.0	0.0
SWRNGNS A 2 6	46	<u></u>	=	13.4	86.4	11.5
TCRAFK21	21	21	0	0.0	100.0	0.0

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GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1987
PAGE 17 OF 18

MANUFACTURER/ Model Group	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
TCRAFKD	295	173	32	18.5	58.5	10.8
TCRAFTA	33	ო	8	75.0	89	6.3
TCRAFTBC	1856	1021	121	11.9	55.0	Ø. S
TCRAFTBF	42	50	4	19.7	46.9	9.5
TCRAFTBL	229	116	22	19.1	50.7	9.7
TEMCO 11A	29	Ø	4	59.1	21.1	12.4
THSS	39	17	9	33.1	44.8	14.8
THUNDRAX7	80	89	ហ	7.3	85.3	6.3
TMPSONNAVION	638	518	64	12.4	81.1	10.1
TRYTEK65	350	118	ŧ.	13.0	33.8	4.4
TRYTEKK	32	ຜ	ო	53.5	16.7	Ø.
UNIVACGC1	680	454	65	14.4	66.7	9 .
UNIVAR 108	2011	1087	116	10.7	54.1	80
UNIVAR415	2395	1567	136	8.7	65.4	5.7
VARGA 2150	131	123	ហ	4.0	94.0	3.7
WACO ASO	30	4	8	40.7	14.3	ω
WACO GXE	37	œ	8	29.5	20.6	6.1
WACO R	32	4	8	13.8	42.9	ຜ.
WACO UPF7	167	80	12	14.6	48.5	7.1
WACD YK	99	<u>t</u>	4	26.3	7.72	7.3
WSK M18	40	38	Ŋ	13.4	94.1	12.6

TABLE 2 - 11

GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT
MANUFACTURER/MODEL GROUP
1987
PAGE 18 OF 18

MANUFACTURER/ Model Group	GROUP	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
WTHRLY201	65	62	4	න ග	94.7	ru ru
TOTAL	267400	217183	1105	9.0	81.2	4.0

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1987

			IMC DAY	DAY			IMC NIGHT	GHT			INC TOTAL		
AIRCRAFT TYPE	1	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
FIXED WING													
FIXED WING - PISTON	PISTON												
1 ENG: 1-3 SEATS	EATS	3354	377	39332	7637	1314	237	25904	11604	3570	388	65229	15283
1 ENG: 4+ SEATS	EATS	45069	1057	1003410	47519	24566	926	316945	29600	45772	1058	1320314	67526
1 ENGINE: TC	TOTAL	48424	1122	1042742	48128	25880	926	342849	31793	49341	1127	1385543	69236
2 ENG: 1-6 SE	SEATS	12430	311	422126	29279	9425	372	193065	17884	12632	305	615069	41861
2 ENG: 7+ SE	SEATS	6285	177	320998	32589	5184	248	156073	19866	6316	175	475769	44657
2 ENGINE: TO	TOTAL	18715	358	743124	43810	14609	447	349138	26730	18947	352	1090838	61209
PISTON: 01	OTHER	23	4	319	169	23	12	151	117	23	12	470	265
PISTON: TC	TOTAL	67162	1178	1786185	65082	40513	1055	692137	41537	68312	1181	2476851	92414
FIXED WING - TURBOPROP	TURBOPR	9											
2 ENG: 1-12 SEATS	EATS	4140	76	377059	37901	3782	112	145073	12046	4168	70	522086	45808
2 ENG: 13+ SE	SEATS	618	32	103038	14247	618	32	77168	13714	623	32	179898	27053
2 ENGINE: TC	TOTAL	4758	82	480096	40491	4400	117	222241	18253	4791	77	701984	53200
TURBOPROP: 01	OTHER	128	51	14117	6104	111	50	6648	3840	128	5	20910	9292
TURBOPROP: TO	TOTAL	4886	80	494213	40948	4510	119	228889	18653	4919	78	722894	54006

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1987

	1	IMC DAY	DAY			IMC NIGHT	IIGHT			IMC TOTAL	OTAL	
AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
FIXED WING - TURBOJET	JET											
2 ENGINE TURBOJET	3845	31	392767	36001	3778	47	172188	17638	3855	26	564932	46688
TURBOJET: OTHER	352	2	38240	6388	274	22	12529	2062	352	51	50661	7868
TURBOJET: TOTAL	4197	34	431007	36565	4052	52	184718	17759	4207	30	615592	47347
FIXED WING: TOTAL	76245	1181	2711405	85143	49076	1063	1105744	48873	77438	1184	3815337	117041
ROTORCRAFT												٠
PISTON	ហ	a	34	69	0	0	0	0	ĸ	œ	34	9
TURBINE	362	86	11436	2961	197	4	3372	1329	364	38	14736	4358
ROTORCRAFT: TOTAL	367	4	11471	2962	197	40	3372	1329	369	4	14771	4359
OTHER AIRCRAFT	រេ	12	8	212	8	7	20	70	ស	12	103	281
TOTAL	76618	1182	1182 2722959	85195	49275	1064	1109136	48891	77812	1185	3830211	117123

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY AIRCRAFT TYPE 1987

						BI AIRCRAFI ITER 1987	7					PAGE	3 OF 6
			VMC DAY	DAY			VMC NIGHT	I GHT			VMC TOTAL	OTAL	
AIRCRAFT TYPE		NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STO	HOURS	STD
FIXED WING													
FIXED WING - PISTON	- PISTON												
1 ENG: 1-3 SEATS	SEATS	63498	33	7692816	275898	23017	684	505490	44393	63498	33	8201562	297230
1 ENG: 4+	SEATS	107215	118	118 10979431	256665	70986	1050	1203237	60240	107260	107	12185065	285688
1 ENGINE:	TOTAL	170713	122	122 18672258	376825	94002	1254	1708727	74830	170758	112	20386632	412266
2 ENG: 1-6 SEATS	SEATS	15385	118	118 1589976	69055	11668	343	307999	28495	15450	107	1897838	89071
2 ENG: 7+ SEATS	SEATS	7419	75	1335570	127979	5850	220	293600	46285	7432	74	1622943	142686
2 ENGINE:	TOTAL	22804	140	2925546	145421	17518	408	601600	54353	22882	130	3520780	168205
PISTON:	OTHER	112	•	12157	3284	52	17	720	297	112	0	12877	3525
PISTON:	TOTAL	193630	186	186 21609962	403924	111572	1318	2311047	92487	193752	171	23920288	445274
FIXED WING - TURBOPROP	- TURBOPA	QO.											
2 ENG: 1-12 SEATS	SEATS	4000	85	802034	48 168	3615	118	167181	12738	4005	84	969082	54497
2 ENG: 13+	SEATS	582	33	208745	31137	456	45	77040	18427	582	33	285110	46347
2 ENGINE:	TOTAL	4583	16	1010779	57356	4071	126	244221	22401	4587	18	1254192	71540
TURBOPROP:	OTHER	188	22	99778	29020	06	29	11714	12625	188	22	111751	37910
TURBOPROP:	TOTAL	4771	40	1110557	64279	4161	129	255935	25713	4775	6	1365942	80964

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY AIRCRAFT TYPE 1987

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		VMC DAY	DAY			VMC NIGHT	(GHT			VMC TOTAL	OTAL	1
AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS FLOWN	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
FIXED WING - TURBOJET	ET											
2 ENGINE TURBOJET	3142	107	658711	45775	2915	121	172109	202 15	3173	108	831480	55097
TURBOJET: OTHER	372	9	49395	6948	213	23	9327	1801	372	5	58637	8161
TURBOJET: TOTAL	3514	108	708106	46299	3128	124	181436	20295	3544	107	890116	55698
FIXED WING: TOTAL	201914	234	234 23428618	411619	118860	1330	2748417	98117	202072	222	26178356	455989
ROTORCRAFT												
PISTON	2803	(C)	586037	43837	1329	106	80280	18910	2813	•	667981	52254
TURBINE	3517	6	1451160	139900	2124	185	166437	34783	3520	0	1617856	140815
ROTORCRAFT: TOTAL	6320	o	2037198	146608	3454	213	246717	38591	6333	•	2285837	150010
OTHER AIRCRAFT	6783	•	413999	21535	27	5	16	146	6783	0	414090	21540
TOTAL	215017	234	234 25879816	437479	122341	1347	2995226	105804	215188	222	28876272	480513

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY AIRCRAFT TYPE 1987

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			DAY TOTAL	OTAL			NIGHT TOTAL	TOTAL	1
AIRCRAFT TYPE	u.	NUMBER ACTIVE AIRCRAFT	STD	HOURS		NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
FIXED WING									
FIXED WING - PISTON	PISTON								
1 ENG: 1-3 SEATS	SEATS	63511	32	7732884	276483	23316	685	531541	45781
1 ENG: 4+ SEATS	SEATS	107502	0	11983559	270775	73570	1026	1520271	75756
1 ENGINE:	TOTAL	171013	32	32 19716454	386991	96885	1234	2051813	88515
2 ENG: 1-6 SEATS	SEATS	15741	0	2012080	78799	13114	290	500290	4 1904
2 ENG: 7+	SEATS	7540	31	1664092	148526	6367	181	456204	56731
2 ENGINE:	TOTAL	23280	31	3676173	168135	19481	342	956494	70530
PISTON:	OTHER	112	0	12476	3442	52	17	871	394
PISTON:	TOTAL	194406	4	23405100	421952	116418	1280	3009179	113179
FIXED WING - TURBOPROP	TURBOPROP								
2 ENG: 1-12 SEATS	SEATS	4334	ဖ	1179413	61811	4228	47	312600	20263
2 ENG: 13+	SEATS	723	٥	310514	35533	624	32	153633	25262
2 ENGINE:	TOTAL	5056	ဖ	1489927	71296	4851	26	466232	32384
TURBOPROP:	OTHER	214	0	113681	29674	116	22	18386	15730
TURBOPROP:	TOTAL	5271	Φ	1803608	77225	4968	61	484619	36002

TABLE 2 - 12

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY AIRCRAFT TYPE
1987

PAGE 6 OF 6

	!	DAY TOTAL	OTAL			NIGHT TOTAL	TOTAL	1
AIRCRAFT TYPE	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
FIXED WING - TURBOJET								
2 ENGINE TURBOJET	3875	61	1051222	44909	3833	38	344084	28123
TURBOJET: OTHER	438	0	87630	8795	281	21	21839	2836
TURBOJET: TOTAL	4312	6	1138852	45762	4114	43	365923	28265
FIXED WING: TOTAL	203989	4	26147554	431394	125500	1283	3859721	122084
ROTORCRAFT								
PISTON	2803	ហ	586072	43836	1329	106	80280	18910
TURBINE	3517	©	1462698	139937	2128	184	169794	34952
ROTORCRAFT: TOTAL	6320	Ø	2048771	146642	3458	213	250074	39740
OTHER AIRCRAFT	6783	•	414083	21542	27	6	=	214
TOTAL	217092	20	50 28610406	456146	128985	1300	4109906	128389

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY BASE REGION OF AIRCRAFT 1987

		IMC DAY				IMC NIGHT	IGHT			IMC TOTAL	DTAL	
REGION	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
ALASKAN	353	114	10995	6435	170	73	5209	4362	353	1.14	16204	9256
CENTRAL	4244	445	171654	28984	2967	352	73004	14568	4590	448	244638	40087
EASTERN	10521	656	431489	39246	6958	524	188030	19107	10716	663	619301	55968
GREAT LAKES	13923	743	528244	45735	8520	573	213951	29741	14039	746	742579	67633
NEW ENGLAND	3427	394	118381	20176	2161	311	41616	8748	3541	400	159997	26558
NORTHWEST MT.	6062	510	227032	34569	4404	332	160146	32893	6088	485	398523	79149
SOUTHERN	12873	722	257063	26087	7456	547	92385	12477	13079	727	349448	34565
SOUTHWESTERN	11840	730	506800	45370	7010	527	18114	21280	11312	680	302342	65793
WESTERN-PACIFIC	13349	767	456632	68904	9761	611	137543	18087	14261	773	895476	85628
TOTAL	76891	1751	2732191	115440	49398	1392	1092998	59866	77980	1764	3826164	157785

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY BASE REGION OF AIRCRAFT
1987

PAGE 2 OF 3

		VMC DAY	DAY			VMC NIGHT	IGHT			VMC TOTAL	OTAL	
REGION	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS	STO	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
ALASKAN	7504	495	1272379	196172	3265	343	87966	29128	7509	485	1360202	214607
CENTRAL	13151	744	1381060	123709	7531	579	190333	24751	13157	744	157 1548	138588
EASTERN	23942	970	2510935	155497	14960	794	342938	34239	23946	970	2853325	177986
GREAT LAKES	38023	1180	3870383	203996	20815	925	471151	40366	38039	1180	4340942	229488
NEW ENGLAND	8908	619	889459	85664	5728	513	123076	21012	8919	619	1023062	97670
NORTHWEST MT.	21037	512	2608551	174684	10652	4 19	330886	61974	21070	1312	3345166	403103
SOUTHERN	38205	1174	4786914	291233	23147	964	337634	53017	28207	1174	5321922	320286
SOUTHWESTERN	30922	888	4102220	275832	16214	550	400151	39743	20302	582	4021114	341702
WESTERN-PACIFIC	34230	1131	4513113	310856	19889	889	644537	60031	34296	1132	5056830	339750
TOTAL	215002	2809	2809 25943022	669891	122199	2228	2928670	122309	215142	2810	2810 28883156	734609

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

TABLE 2 - 13

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY BASE REGION OF AIRCRAFT 1987

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PAGE 3 OF

		DAY TOTAL	OTAL			NIGHT TOTAL	TOTAL	
REGION	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
ALASKAN	7509	495	1283390	196453	3269	343	93174	30365
CENTRAL	13226	745	1553039	134415	7738	586	263382	33952
EASTERN	24276	972	2942087	170011	16050	8 16	530280	45316
GREAT LAKES	38707	1185	4408970	220381	22088	944	694390	59855
NEW ENGLAND	8940	619	1018311	87765	5895	518	164733	28199
NORTHWEST MT	21310	913	3247061	191846	12083	735	370439	51079
SOUTHERN	36406	1176	5047208	298827	23883	973	629819	57354
SOUTHWESTERN	32022	1102	4215241	302101	16014	912	402114	47129
WESTERN-PACIFIC	34696	1135	5168635	347947	21851	923	783620	76386
TOTAL	217090	2816	2816 28690260	712461	128872	2270	4032948	155578

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS OUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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		IMC				VMC	Q	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
OTHER 1	475	159	2835	1169	9683	0	599364	49559
OTHER 2	484	87	12116	7130	1289	on	152726	29058
OTHER 3	37	23	826	774	163	٥	8303	3116
OTHER 4	45	30	5034	3540	115	#	14985	15507
OTHER 5	23	12	470	265	92	0	8257	3438
OTHER 6	264	4	93679	22134	240	5	108125	21931
OTHER 7	155	52	35485	23232	181	~	70808	31532
OTHER 8	8	ũ	20244	9288	65	22	39233	30862
OTHER 9	200	24	51904	15148	414	38	108957	20102
OTHER 10	106	4	15033	3933	164	5	12023	3198
OTHER 11	က	7	28	67	728	0	106453	26169
OTHER 12	7.7	25	2621	1378	160	0	44445	10303
OTHER 13	8	0	0	0	2160	0	98689	12611
ADAMS A50S	0	•	0	•	113	0	6142	1716
AERORSJ2	-	-	-	-	12	0	541	178
AEROSPAS355	w	13	92	201	118	0	56593	16920
AEROSPSA316	0	0	0	0	11	0	6455	424
AGUSTA205	0	•	•	0	91	0	6752	2883
AGUSTAA 109	27	ហ	418	191	38	0	8268	1020
AIRPTSA	0	0	0	•	&2 &0	0	8124	1469
AIRSPC18	0	0	0	0	11	•	1318	569
AIRTRCAT300	0	0	•	0	422	•	133425	14004

GENERAL AVIATION ANNUAL HOURS FLOWN

		•	SENERAL A' BY WEATI	VIATION ANNU, HER AND LIGHT MANUFACTURER, 1987	GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987		PAGE	2 OF 32
		INC	•			VIBC	ن	
MANUFACTURER/	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	1 P &
AIRTRCAT400	٥	٥	•	0	S.	•	23612	2718
AMD FALC10	131	•	26953	13176	06	17	30387	10001
AMD FALC20	177	0	26117	11488	140	24	33291	10503
AND FALCSO	115	0	14236	4490	112	ហ	24868	5558
ARCTICS 1A	0	0	0	0	38	0	1946	686
ARCTICS 181	0	0	0	0	12	0	444	87
ARONCA 15	0	0	0	0	107	0	4261	1781
ARONCAS8	0	٥	0	0	99	0	2296	260
ARONCA65	0	0	0	0	06	0	6341	2078
ARONCAC3	•	0	0	0	91	0	235	z Z
AVIANWFALCON	0	0	0	0	21	0	279	74
AVIANWSKYHWK	0	0	0	0	30	0	1125	243
AYRES S2	15	w	492	222	737	0	310207	37461
BAC 111	70	0	376	205	11	4	1854	613
BAG B206	Ξ	4	128	66	61	0	957	545
BAG DH125	69	0	9935	2023	9	ဖ	18449	4044
BALWKSFIREFY	8	7	79	278	1101	0	50213	6119
BBAVIA11	0	0	0	0	490	0	30034	4229
BBAVIA7	0	•	0	0	2475	•	227464	25130
BBAVIA8	0	•	0	0	206	0	22599	4697
BEECH 100	247	0	27598	4701	247	•	55453	11102
BEECH 17	30	13	92	20	88	0	4437	958

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
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		INC	4	1		VMC	2	1
MANUFACTURER/	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
BEECH 18	280	36	36144	14009	373	9	59019	16289
BEECH 1900	5 8	•	9097	3991	22	ო	11162	3590
BEECH 200	672	38	89429	28178	610	53	178848	25631
BEECH 23	1264	153	22739	6492	2551	0	266128	30677
BEECH 300	40	0	10915	3499	.	60	18334	3617
BEECH 33	1269	110	35081	7641	1678	32	185681	16317
BEECH 35	3506	277	79901	11392	6083	0	496943	34051
BEECH 36	1849	110	57509	7810	2255	23	319437	26226
BEECH 45	130	28	2596	1058	191	0	16971	4087
BEECH 50	184	5 8	3005	1207	199	0	9793	2146
BEECH 55	1879	2	69744	13307	2029	9	198196	20362
BEECH 56	34	•	5382	2258	4 3	0	3075	496
BEECH 58	1309	82	71483	11652	1439	စ္တ	198268	22124
BEECH 60	293	9	18715	4876	410	0	48370	9142
BEECH 65	28	27	957	950	6	•	7110	5589
BEECH 76	238	33	10319	2931	298	0	76947	18175
BEECH 77	52	5 8	1428	1081	241	0	48996	12597
BEECH 80	.	Ξ	5263	3335	65	ហ	21429	7323
BEECH 90	947	26	86217	16892	1011	3	223677	29151
BEECH 95	374	33	9608	2115	404	0	34547	6871
BEECH 99	82	0	21495	5512	44	22	37830	22779
BELL 204	-	4	12	38	88	0	7002	2253

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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		INC	O	1		>	VMC	1
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	_ Œ	ZAH	STD	HOURS	STD
BELL 206	m	4	122	549	1723	0	1015966	132353
BELL 212	•	0	0	•	74	0	34453	5861
BELL 222	73	7	1202	576	79	0	20142	6688
BELL 412	4	13	3439	1148	49	0	35890	12549
BELL 47	0	•	•	0	778	0	190237	18998
BLANCA 11	0	0	0	0	46	0	2050	373
BLANCA1413	•	•	0	0	135	0	9518	2075
BLANCA 1419	06	28	316	139	159	•	10125	4411
BLANCA 17	379	103	7199	3012	957	0	54403	6510
BLANCA7	69	48	1095	838	1993	0	203380	35295
BLANCA8	34	24	9	29	446	0	31813	4084
BNORM BN2	20	7	888	673	99	0	43107	9511
BOE ING707	m	٥	7	•	m	0	132	0
BOEING727	36	0	13905	4413	10	7	2486	1776
BOEING75	•	•	0	0	938	0	61618	8577
BOLKMS105	٥	0	٥	0	112	•	23960	4330
BOLKMS117	•	•	0	•	53	0	32668	3347
BRAERODH125	58	8	7903	2797	63	ĸ	10819	2617
BRASOVI 528	0	0	0	٥	30	0	2191	388
BRWSTRFLEET2	0	0	•	0	12	0	1424	1722
BRWSTRFLEET7	0	0	0	0	12	0	565	133
BUKER 131	0	0	0	•	17	0	1513	234

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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,	i	IMC				S	VMC	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE IRCRAF	STD	HOURS	00
CAMRONMODELO	•	0	0	0	183	0	7117	1622
CASA C212	13	0	1507	695	13	0	5418	373
CESSNA120	=	6	156	251	619	0	40027	4750
CESSNA140	7	=	6	64	1576	0	92773	7726
CESSNA 150	1530	772	37523	11244	17397	0	3465501	246953
CESSNA170	94	8	312	508	2088	0	172492	20372
CESSNA172	7280	532	224233	30294	22998	9	2917124	194225
CESSNA 175	20	78	535	324	1018	0	49427	5425
CESSNA177	1161	159	33314	13259	2609	4	208744	19812
CESSNA180	407	130	6062	2754	2290	0	237819	37003
CESSNA 182	5976	413	109619	13691	13228	43	1382287	60688
CESSNA185	255	19	4567	1616	1438	0	229639	25698
CESSNA188	22	32	6699	9596	1358	32	306694	45422
CESSNA 190	Ξ	ဏ	8	28	6	0	3717	764
CESSNA195	46	27	859	335	351	0	24098	4102
CESSNA205	168	\$	2875	1259	230	0	19928	5979
CESSNA206	1167	160	37777	9729	2520	0	385236	51582
CESSNA207	38	43	8060	9361	346	0	290503	58055
CESSNA208	47	0	999	283	47	0	6698	280
CESSNA210	3801	262	140177	26454	5475	45	657103	53883
CESSNA303	150	11	15399	8110	174	∞	30068	10606
CESSNA305	on	80	24	61	208	0	28607	4540

STD ERROR

MANUFACTURER/ MODEL GROUP

CESSNA310 CESSNA320 CESSNA335 CESSNA336 CESSNA340

CESSNA401 CESSNA402 CESSNA404 CESSNA411 CESSNA414 CESSNA421 CESSNA425 CESSNA441

CESSNA337

CESSNAUC94

CHILD S1 CHILD S2

CESSNA650 **CESSNAT50**

CESSNA501

CESSNASOO

CNDAIRCL600

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BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1987

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MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD ERROR	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
CNTRAR 101	•	•	0	0	28	0	1914	296
COMMTH185	0	•	0	0	29	0	1394	396
CONAERLA4	123	23	709	348	456	0	33835	6218
CURTISUR	•	٥	٥	0	ო	0	36	4
CURTISROBIN	0	0	•	0	က	0	8	7
CURTISTRVAIR	•	0	0	0	84	0	2741	953
CVAC 240	13	0	240	221	13	0	985	871
CVAC BT13	0	٥	0	0	32	0	1577	266
CVAC STC580	24	9	945	418	32	0	2503	1111
DART G	0	•	•	0	ហ	0	325	88
DHAV DHC1	0	0	•	0	78	0	6270	1074
DHAV DHC2	67	45	5341	3687	212	0	47466	21740
DHAV DHC3	0	0	0	0	9	0	7928	682
DHAV DHC4	25	0	540	0	25	0	2160	0
DHAV DHC8	90	9	13689	4571	72	0	70353	15335
DHAVXXDH82	o	0	0	0	84	0	2959	689
DOUG A26	0	0	0	0	80	0	282	72
DOUG DC3	69	26	6710	3526	197	80	23117	5015
DOUG DC4	0	0	0	0	19	0	1339	676
DOUG DC7	0	0	0	0	28	0	3280	383
820 DOUG	7	0	403	0	7	0	1208	0
DOUG DC9	7.1	•	13420	1339	13	23	7495	12858

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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		IMC				VMC	<u>u</u>	
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STO	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
EAGLE DW	0	0	0	0	52	0	13115	1416
EAGLEBC7	0	0	0	0	64	0	1591	388
E1RVON20	0	0	0	0	109	0	8759	1113
EMB 110	10	13	5172	7294	43	0	3676	3633
ENSTRMF28	0	0	0	0	318	0	69848	18926
FLEET 168	0	0	0	0	4	0	427	107
FRCHLD24	0	0	0	0	45	0	1655	515
FRCHLDM62	0	0	0	0	-	٥	4043	692
GENBALAX6	0	0	0	0	8	0	1557	344
GLASFL201	0	•	0	0	28	0	1886	382
GLASFLH301	0	0	٥	0	108	0	7640	1621
GROB 103CAT	0	0	0	0	53	0	12775	1969
GROB 109	-	8	24	37	29	0	4129	1354
GROB ASTIR	0	0	0	0	57	0	5050	712
GRTLKS2T1	60	o	92	103	138	G)	11122	1748
GRUMANSA 16	4	0	112	0	•	0	1012	0
GRUMAVAA1	110	27	1326	477	200	0	46279	4287
GRUMAVAAS	519	109	5733	2226	1049	0	93211	14632
GRUMAVG1159	37	0	6203	2068	25	ហ	5585	1402
GRUMAVG164	٥	0	0	0	968	0	280955	41897
GRUMAVG21	0	0	0	0	22	0	4242	0
GRUMAVTBM	0	•	0	0	13	0	388	131

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SOR MANUFACTURER/MODEL GROUP

			BY WEAT	BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987	CONDITIONS MODEL GROUP		PAGE	9 OF 32
		INC	0			VINC	U	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STO	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STO
GULSTM112	376	79	18029	7453	632	0	47612	8824
GUL STM500	224	4	13327	3326	234	თ	50517	11864
GULSTM520	w	ო	0,	88	0	0	1630	256
GULSTM560	33	17	2789	2045	75	•	4730	803
GULSTMB80	192	30	4407	2264	210	0	28246	10267
GULSTM680TP	52	ø	1473	006	52	ø	6025	1635
GULSTM690TC	27	0	2759	1084	24	ო	4585	1172
GUL STM690TP	430	0	42462	12917	420	19	94612	17713
GUL STMAA1	24	52	190	200	412	0	31689	4872
GULSTMAAS	244	\$	5813	1819	583	0	96509	21514
GULSTMG1159	156	0	29792	7141	108	23	38813	12005
GULSTMG159	9.4	0	26989	6504	84	2	17151	6485
GULSTMG44	21	5	462	305	47	•	3277	289
GULSTMG73	5	-	466	182	-	0	6522	1394
GULSTMGA7	48	Ŋ	1447	452	26	0	10573	3142
H23/HTE	0	0	0	0	26	0	4803	1004
H34/55	0	•	•	0	a	0	217	0
HELIO H295	50	4	394	433	06	0	11100	3376
HELIO H391	8	-	22	2	က	•	205	28
HILLERFH1100	0	•	0	0	41	0	2654	1921
HILLERUH12	0	٥	0	0	224	•	47501	7486
HUGHES269	-	4	ဖ	17	454	•	181099	30496

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
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		IMC				VMC	U	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
HUGHES369	0	0	•	0	440	0	139087	23663
HWKSLYDH125	183	0	22064	8801	165	8	32296	7655
HYNES B2	0	0	0	0	36	0	855	326
INTRCP200	26	ເດ	370	210	32	0	2221	535
ISRAEL1121	87	0	12829	7376	10 4	11	4099	1740
ISRAEL1123	16	ហ	1138	200	20	4	3396	1499
ISRAEL1124	205	0	25515	0669	166	20	41725	8432
JBMSTRDGA15	4	4	8	-	34	0	1388	213
LEAR 23	42	0	8413	2246	17	5	3596	2629
LEAR 24	117	•	12832	3634	117	0	23958	8378
LEAR 25	247	0	37290	13300	200	30	70937	26542
LEAR 35	420	0	65674	18324	318	52	95696	22132
LEAR 55	92	4	13569	3668	82	œ	28630	5025
LET L13	0	0	0	0	124	0	11263	1245
LKHEED12A	ო	8	S	ო	80	0	351	129
LKHEED1329	18	0	7067	2608	68	Ø	17558	4725
LKHEED18	0	0	0	0	19	0	1643	0
LKHEEDPV1	0	0	0	0	=	0	657	332
LKHEEDT33	ហ	7	0	0	7	0	362	101
LUSCOMB	0	0	0	0	1254	0	77275	10558
MART IN404	0	0	0	0	8	0	27	0
MAULE M4	12	12	509	574	222	0	11311	1580

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
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		IMC			:	VMC	U	1
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD		STD	HOURS	STO
MAULE MS	92	24	739	357	408	0	33240	4214
MAULE MB	12	•	281	111	9	0	9148	1505
MCLISHFUNKB	0	0	0	0	72	0	2959	539
MEYERSOTW	0	0	0	0	9	0	958	175
MNCDUP90	0	0	0	0	20	•	612	83
MMITEM 18	8	ю	ហ	on .	72	0	4397	1193
MOONEYM20	3127	258	87788	13268	5653	0	551850	39793
MRCHT1S205	8	8	-	-	58	0	1183	190
MTSBSIMU2	700	ស	13764	2911	197	œ	36206	6714
MTSBSIMU300	7.4	7	5110	1145	67	ហ	18176	3156
MULTECD16	•	•	•	0	21	0	696	238
NAMER 825	8	ო	21	26	22	0	626	183
NAMER F51	Ξ	60	6	73	111	0	4851	776
NAMER NA260	4	7	189	80	99	0	4217	951
NAMER T6	107	68	1792	1148	508	0	33843	10576
NATBAL752	0	0	0	0	31	0	915	246
NAVAL N3N	0	0	٥	0	36	0	1088	495
NAVIONNAVION	22	21	270	291	338	•	18041	3373
NORD 3202	0	0	0	0	18	0	1440	237
NORD SV4	0	0	0	0	20	•	973	112
NORWST65	0	0	0	0	91	0	558	188
ORLHELH19	•	0	0	0	Ø	0	913	0

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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		IMC				>	VMC	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STO
ORLHELS58	0	•	0	0	19	0	8151	3188
PARTENP68	33	4	995	346	40	0	13058	2198
PICARDAX6	0	•	0	0	26	•	817	365
PILATSB4	0	٥	0	0	25	0	4075	1377
PIPER 600	383	4	29577	5376	340	99	37848	7660
PIPER E2	0	•	0	0	8	٥	60	o
PIPER J2	0	0	٥	0	22	0	418	107
PIPER J3	0	0	0	0	2158	0	151185	33463
PIPER J4	0	0	0	0	112	0	5742	906
PIPER US	0	0	٥	0	177	٥	14547	4487
PIPER PA12	0	0	0	0	925	0	70918	11281
PIPER PA14	0	0	0	0	49	0	4669	654
PIPER PA15	0	0	٥	0	115	0	9043	1510
PIPER PA16	0	0	0	0	193	0	13229	3144
PIPER PA17	0	0	0	0	19	0	3080	523
PIPER PA18	თ	23	185	460	2701	0	394047	67205
PIPER PA20	44	26	2215	1517	291	0	23237	7132
PIPER PA22	189	06	1559	898	2909	0	204599	18960
PIPER PA23	1824	183	74939	17146	2685	19	300053	35236
PIPER PA24	1253	167	23300	5324	2757	•	257830	30165
PIPER PA25	0	•	0	0	1065	0	164627	27827
PIPER PA28	7448	485	255828	35343	20575	0	2295905	118827

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			GENERAL A BY WEAT BY SDR	NERAL AVIATION ANNUAL HOUR BY WEATHER AND LIGHT CONDI BY SDR MANUFACTURER/MODEL 1987	AL HOURS FLOWN T CONDITIONS /MODEL GROUP		PAGE 13	13 OF 32
		IMC	υ			VIAC	υ	
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STO	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
PIPER PA30	984	69	35502	11308	1121	0	117431	13488
PIPER PA31	1733	42	132424	20181	1732	4	445858	95645
PIPER PA31T	536	0	43389	8998	469	43	77854	15131
PIPER PA32	3074	194	115621	22323	4174	0	572103	78820
PIPER PA34	1469	142	67791	12028	1895	36	283650	34919
PIPER PA36	0	0	0	•	302	0	58750	11018
PIPER PA38	74	5	707	517	1300	0	424312	92999
PIPER PA42	113	0	20665	4047	87	12	22709	4907
PIPER PA44	282	22	19230	4321	318	7	66519	13293
PIPER PA46	274	0	13866	2371	274	0	49243	5658
PR0PJT200	24	o	256	191	92	0	3363	689
RAVEN RX6	٥	0	0	0	6	0	1412	28
RAVEN S50	0	0	0	0	21	0	761	166
RAVEN S55	0	•	0	•	533	0	24971	4067
RAVEN S60	0	0	0	0	219	0	10644	1646
RAVEN SGG	0	0	0	0	39	0	4301	1096
RKWELL500	28	ო	1016	225	34	0	6421	968
RKWELL700	6	ო	2234	940	19	ო	4475	1312
RKWELLNA265	299	0	49189	10597	262	24	48668	11690
ROBSINR22	0	0	0	0	221	•	61962	18336
ROLSCHLS	0	0	0	•	102	0	9166	1830
RYAN ST3	0	0	0	0	E 6	0	3165	587

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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		IMC	4.			VIAC	U	
MANUFACTURER/ Model Group	UMBE CT1V RCRA	STD	HOURS	_ 22	NUMB ACTI AIRCR	STD	HOURS	STD
SOCATARALLYE	-	-	ø	7	£	0	1141	119
SOCATATB 10	11	*	224	84	26	•	5369	1140
SOC : TATB20	67	12	2953	1272	82	0	20211	7185
SPHRTHCIRRUS	0	0	0	•	62	0	4174	1265
SPHRTHNIMBUS	•	٥	0	0	47	0	4084	293
SPHRTHVENTUS	0	0	0	0	45	0	7222	1460
STBROSSD3	50	0	44000	0	٥	0	0	0
STNSDN10	0	0	0	0	45	٥	2056	584
STNSONLS	•	0	0	0	63	0	3148	824
STNSONSR9	0	0	0	0	ហ	0	143	36
STNSONV77	-	8	-	-	38	0	1231	197
STOLAMRC3	8	ო	o	4	77	0	2247	474
SUPAC LA	0	0	0	•	27	0	1425	404
SUPAC V	0	0	0	0	80	0	16	27
SWRNGNSA226	139	•	21177	5927	121	-	57125	18109
SWRNGNSA227	47	0	32665	10872	29	7	43249	9583
SWRNGNSA26	œ -	0	14396	6874	81	0	4618	2062
TCRAFK21	0	0	0	0	21	0	1565	287
TCRAFKD	0	0	0	0	173	•	10902	2499
TCRAFTA	0	0	0	0	ო	0	258	0
TCRAFTBC	21	27	128	166	1021	0	84910	14387
TCRAFTBF	0	0	٥	٥	20	0	1324	306

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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STD ERROR 1565 1033 1059 4989 6850 159 1016 262 6079 8 Ξ 65 ī 1231 132 8272 1341 480513 12436 HOURS 1378 51554 5764 64167 10782 385 128 4313 387 222 28876274 54186 32760 20235 Z Z STD ERROR NUMBER ACTIVE AIRCRAFT 116 1567 17 454 1087 2 215188 62 STD ERROR 1160 256 206 9 117123 HOURS FLOWN 190 3830211 195 6 I I STD ERROR 1185 25 9 0 NUMBER ACTIVE AIRCRAFT 8 26 0 77812 MANUFACTURER/ MODEL GROUP **IMPSONNAVION** VARGA 2150 UPF7 UNIVAR415 ASO TEMCO 11A **THUNDRAX7** UNIVAR 108 GXE **X** 18 UNIVACGC1 WTHRLY201 **FRYTEK65** × TCRAFTBL TRYTEKK TOTALS TH55 WACO WACO WACD WACD WACO

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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		DAY	_			NIGHT	Ŧ	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
AIRTRCAT400	28	0	22341	2554	m	∞	1271	3059
AMD FALC10	131	0	42319	8292	118	Ξ	15021	6387
AMD FALC20	177	0	45759	9384	177	٥	13649	4959
AMD FALCSO	115	0	30610	5395	83	7	8484	1988
ARCTICS 1A	38	•	1881	641	ហ	4	99	23
ARCTICS 18 1	12	0	444	87	•	0	0	0
ARONCA 15	107	0	4231	1769	21	50	79	77
ARONCA58	92	0	2296	560	٥	0	•	0
ARONCA65	06	0	6341	2078	0	0	0	0
ARONCAC3	91	0	235	55	0	0	0	0
AVIANWFALCON	21	0	279	74	•	•	0	0
AVIANWSKYHWK	99	0	1125	243	0	0	•	0
AYRES S2	737	0	279776	36853	179	73	30609	15527
BAC 111	50	•	1714	678	17	4	516	158
BAG B206	61	0	1009	578	7	4	75	65
BAG DH125	69	0	22 103	3102	69	0	6281	787
BALWKSFIREFY	1101	0	50233	6128	8	~	8	509
BBAVIA11	490	0	29878	4212	39	31	156	125
BBAVIA7	2475	0	221863	24628	499	113	5597	2429
BBAVIA8	206	0	20251	4150	39	9	2295	1459
BEECH 100	247	0	65812	11409	247	0	17240	2861
BEECH 17	88	0	4434	949	26	13	84	44

And in the Section

			GENERAL A	AL AVIATION ANNUAL WEATHER AND LIGHT	ANNUAL HOURS FLOWN LIGHT CONDITIONS			
				SDR MANUFACTURER/MODEL GROUP 1987	ODEL GROUP		PAGE	19 OF 32
		DAY	>			NIGHT	F	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
BEECH 18	379	12	61255	16413	326	59	36692	12614
BEECH 1900	26	0	13279	3109	26	•	6980	3137
BEECH 200	717	0	214005	28132	717	0	54271	9459
BEECH 23	2551	0	255458	29648	1918	132	33365	5333
ВЕЕСН 300	94	0	23189	2546	4 0	0	909	1354
BEECH 33	1705	0	196364	15762	1411	98	24397	4896
BEECH 35	6083	0	518249	33438	4291	256	58391	8249
BEECH 36	2271	0	335024	25775	1899	105	41881	5887
BEECH 45	191	0	18021	3817	155	24	1554	467
BEECH 50	199	0	11462	2072	183	81	1336	348
BEECH 55	2085	0	222971	19886	1733	114	44722	8509
BEECH 56	43	0	3588	395	43	0	4869	2160
BEECH 58	1456	0	214789	20773	1427	38	54962	10645
BEECH 60	410	0	55104	7586	264	63	11976	3566
BEECH 65	16	0	6953	5266	21	25	1113	1342
BEECH 76	298	0	76301	17932	282	61	10965	3504
BEECH 77	241	0	44163	10424	194	25	6862	3171
BEECH 80	86	0	21623	6144	16	=	5069	2479
BEECH 90	1038	0	257564	29950	1000	37	52329	7016
BEECH 95	404	0	38507	6047	361	39	5648	2305
BEECH 99	82	0	31925	12146	82	0	27400	13049
BELL 204	8	0	6873	2231	22	5	148	105

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP

			BY SDR	BY SDR MANUFACTURER/MODEL GROUP 1987	DEL GROUP		PAGE	PAGE 20 OF 32
		DAY	>			NIGHT	F	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STO	HOURS	STD
BELL 206	1723	0	938745	132310	878	164	74582	29579
BELL 212	74	0	33126	5296	25	20	1326	632
BELL 222	79	0	16756	5053	7.7	*	4633	2505
BELL 412	49	0	38763	14077	=	5	667	966
BELL 47	778	0	172431	18381	436	79	16939	8510
BLANCA 1 1	46	0	2044	373	-	8	•	0
BLANCA1413	135	0	9495	2021	10	30	23	7.1
BLANCA1419	159	0	9891	4195	100	27	551	291
BLANCA 17	957	0	56942	6755	538	105	4659	1771
BLANCA7	1993	0	197115	34658	637	123	7364	2735
BLANCA8	446	0	30983	3901	222	45	871	503
BNORM BN2	99	0	41180	8614	5	12	2915	1177
BOE ING707	က	0	139	o	0	0	0	•
BOEING727	36	0	13514	2934	36	0	2876	654
BOEING75	938	0	61384	8535	42	33	229	190
BOLKMS 105	112	0	20910	5572	26	25	3123	1621
BOLKMS117	53	0	20226	2621	53	0	12442	1349
BRAERODH125	9	0	14910	2455	9	0	3811	731
BRASOVIS28	30	0	2191	388	•	0	•	•
BRWSTRFLEET2	12	•	1424	1722	•	•	•	0
BRWSTRFLEET7	12	0	565	133	•	0	0	0
BUKER 131	17	0	1476	230	2	7	37	33

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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		DAY				NIGHT	Ę	1
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STO	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
CNTRAR101	28	•	1914	296	0	٥	0	0
COMVTH185	29	•	1332	370		4	-6	33
CONAERLA4	456	0	31832	5753	285	28	2712	366
CURTISJR	ო	•	36	4	٥	0	0	0
CURTISROBIN	ო	0	18	7	•	٥	0	0
CURTISTRVAIR	48	0	2736	136	-	ო	4	œ
CVAC 240	13	0	1014	942	13	o	211	150
CVAC BT13	32	•	1565	264	v	ო	=	۲
CVAC STC580	32	0	2461	1056	24	0	987	414
DART G	ហ	0	325	86	0	0	0	0
DHAV DHC1	78	•	6168	1079	16	0	102	125
DHAV DHC2	212	•	44256	21720	89	46	8552	5917
DHAV DHC3	40	0	7542	725	38	7	386	70
DHAV DHC4	25	0	2700	0	0	0	0	0
DHAV DHC6	72	0	61573	12286	99	7	22469	8098
DHAVXXDH82	84	0	2959	689	0	0	0	0
DOUG A26	co	0	282	72	٥	0	0	0
DOUG DC3	197	co	21605	4298	75	27	8207	4326
DOUG DC4	19	0	1273	642	13	7	99	34
DOUG DC7	28	0	3112	249	12	0	168	134
DOUG DC8		0	1208	o	7	0	403	0
pond pc9	1.1	0	16904	10729	7.1	0	4011	790

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP 1987

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		DAY	>			NIGHT	F	
MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS	STD
EAGLE DW	55	0	13115	1416	ហ	φ	0	0
EAGLEBC7	64	0	1591	389	0	0	0	0
E I RVONZO	109	0	8759	1113	0	0	0	0
EMB 110	43	0	4784	6561	10	13	3202	4614
ENSTRMF28	318	0	58944	12933	192	24	10929	7759
FLEET 168	14	0	427	107	0	0	0	0
FRCHLD24	45	0	1579	398	-	ო	73	129
FRCHLDM62	111	0	4038	069	4	ß	ø	7
GENBALAX6	59	٥	1557	344	0	0	0	0
GLASFL201	28	0	1886	392	0	0	0	0
GLASFLH301	108	0	7640	1621	0	0	0	0
GROB 103CAT	53	0	12775	1969	0	0	0	0
GR08 109	63	0	4 102	1353	23	g	15	4
GROB ASTIR	57	0	5050	712	0	0	o	o
GRTLKS2T1	146	0	10832	1595	52	18	385	242
GRUMANSA 16	4	0	731	0	4	0	394	0
GRUMAVAA1	200	0	42500	3974	350	29	5012	1095
GRUMAVAA5	1049	0	88819	12629	8 15	16	9789	2974
GRUMAVG1159	37	0	8715	1197	37	•	3380	069
GRUMAVG164	968	0	280925	41884	7	2	78	140
GRUMAVG21	22	0	4242	•	0	0	0	0
GRUMAVTBM	13	0	389	127	4	8	Ø	ß

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GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SDR MANUFACTURER/MODEL GROUP

			1 XOX	BY SUK MANUFACIUREK/MUDEL GROU 1987	יבר פאטטר		PAGE :	25 OF 32
		DAY	>			NIGHT	4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MANJFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
GULSTM112	632	0	53723	9074	543	26	11721	2945
GULSTM500	240	0	48958	9012	220	91	14886	6828
GULSTM520	9	•	1600	139	vo	ო	6	69
GULSTM560	75	0	6684	1225	19	13	835	511
GULSTM680	210	0	28367	10000	191	31	4287	2792
GULSTM680TP	56	0	6913	1378	48	∞	585	263
GULSTM690TC	27	0	5968	858	27	•	1376	362
GULSTM690TP	430	0	104895	16802	428	α0	32135	7276
GULSTMAA1	412	0	29708	4425	290	49	2281	757
GULSTMAAS	583	0	92275	20668	473	35	9980	3526
GULSTMG1159	156	0	47642	6702	156	0	20963	3878
GULSTMG159	96	0	31168	5067	92	ហ	12972	2934
GULSTWG44	47	0	3428	306	38	80	310	66
GULSTMG73	=	0	6871	1385	ហ	-	117	46
GULSTMGA7	56	0	10269	2998	55	8	1751	546
H23/HTE	26	0	4600	866	0	7	204	168
H34/55	~	0	195	0	8	•	22	0
HELIO H295	06	0	10278	3023	29	51	1216	634
HELIO H391	ო	0	212	32	7	-	4	5
HILLERFH1100	4	0	2652	1922	က	ø	8	4
HILLERUH12	224	0	41316	6629	111	20	6289	2284
HUGHES269	454	0	152754	24395	231	38	27522	12549

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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		DAY	>			NIGHT	도	
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
HUGHES369	438	œ	106849	20424	321	8	34540	16466
HWKSLYDH125	183	0	40927	5708	183	0	13433	2327
HYNES B2	36	0	741	229	-	4	113	308
INTRCP200	32	0	2416	632	4.	φ	174	113
ISRAEL1121	87	0	13637	6146	87	0	3292	751
ISRAEL 1123	25	0	2838	999	41	ហ	1193	661
ISRAEL1124	205	0	50930	5781	205	0	16310	2953
JBMSTRDGA15	34	0	1366	215	G	4	24	50
LEAR 23	42	0	6199	1218	42	0	5810	3132
LEAR 24	115	ω	25654	6840	117	0	11135	9640
LEAR 25	539	41	67251	21638	247	0	40794	17030
LEAR 35	420	0	128432	13677	420	0	32938	10693
LEAR 55	97	0	30032	3419	95	4	11747	2149
LET L13	124	0	11263	1245	0	٥	•	0
LKHEED12A	œ	0	356	132	0	0	0	0
LKHEED1329	8	0	20604	3899	72	7	4021	865
LKHEED18	19	0	822	0	61	٥	822	0
LKHEEDPV1	Ξ	0	657	332	0	0	•	0
LKHEEDT33	7	0	371	104	-	-	8	7
LUSCOMB	1254	0	74093	9481	275	96	3131	1602
MART IN404	7	0	27	0	0	0	0	0
MAULE M4	222	0	10948	1492	127	28	872	483

GENERAL AVIATION ANNUAL HOURS FLOWN
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BY SDR MANUFACTURER/MODEL GROUP
1987

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		DAY	> .	:		NIGHT	Ħ	
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	<u> </u>	NUMB ACTI AIRCR	STD	HOURS	STD
MAULE MS	408	0	32923	4180	225	29	1054	230
MAULE MG	65	0	8724	1516	45	ស	705	127
MCLISHFUNKB	72	0	2936	537	13	7	23	7
MEYERSOTW	19	0	945	174	8	8	13	=
MNCOUP90	20	0	612	85	0	0	0	0
MNMITEM 18	72	0	4333	1195	13	80	69	50
MOONEYM20	5653	0	551153	38660	3839	242	88484	13783
MRCHT I S205	29	0	1119	174	16	4	65	22
MTSBSIMU2	200	ω	39963	6477	198	7	10007	3238
MTSBSIMU300	75	0	19007	2972	74	8	4279	559
MULTECD16	21	0	891	206	12	4	78	43
NAMER B25	22	0	898	180	11	4	19	30
NAMER F51	111	0	4804	793	15	6	53	35
NAMER NAZGO	64	0	4137	964	24	o	269	139
NAMER TG	508	0	33809	10290	177	79	1825	1171
NATBAL752	31	0	915	246	0	0	0	0
NAVAL N3N	36	0	1062	497	10	ဖ	25	16
NAVIONNAVION	338	0	17607	3386	145	14	702	384
NORD 3202	18	0	1429	252	'n	O	:	15
NORD SV4	20	0	973	112	0	0	0	٥
NORWST65	16	0	558	188	0	0	0	0
ORLHELH19	Ø	0	913	0	0	٥	0	0

GENERAL AVIATION ANNUAL HOURS FLOWN

			BY SDR N	ER AND	CONDITIONS MODEL GROUP			
				1987			PAGE	28 OF 32
		6	DAY			HOIN .	<u> </u>	1
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS	STD
ORLHELS58	19	0	7619	3492	12	7	532	304
PARTENP68	40	0	13137	2263	36	ო	916	254
PICARDAX6	26	0	817	365	8	8	-	-
PILATSB4	25	0	4075	1377	0	0	0	0
PIPER 600	393	0	51239	5423	330	32	16185	3190
PIPER E2	8	0	ω	0	•	0	0	0
PIPER J2	22	0	4 18	107	0	0	0	0
PIPER J3	2158	•	150723	33394	23	30	455	909
PIPER J4	112	0	5714	988	ın	9	24	28
PIPER J5	177	0	14431	4479	51	=	115	68
PIPER PA12	925	0	68569	10742	195	54	2281	186
PIPER PA14	64	0	4495	638	33	9	175	4
PIPER PA15	115	0	9032	1510	-	4	=	30
PIPER PA16	193	0	12231	2886	95	4	997	561
PIPER PA17	61	0	3067	522	4	ო	13	0
PIPER PA18	2701	٥	380250	64759	599	164	14398	13389
PIPER PA20	291	0	23704	7421	145	37	1749	1034
PIPER PA22	2909	0	193702	17388	1352	177	12248	2919
PIPER PA23	2755	0	305643	35697	2037	170	69348	14104
PIPER PA24	2757	0	252946	27629	1982	150	27959	7227
PIPER PA25	1065	0	163903	27751	76	24	724	852
PIPER PA28	20575	0	2248802	115661	15212	450	305282	26711

GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
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		DAY	A :	; ; ; ;		NIGHT	Ŧ	
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD	HOURS	STD
PIPER PA30	1121	•	124182	12065	952	75	28753	8490
PIPER PA31	1768	0	414972	70358	1710	53	162809	43471
PIPER PA31T	536	0	93307	12393	536	0	27937	5794
PIPER PA32	4174	0	586494	72928	3520	160	101884	23273
PIPER PA34	1918	0	290098	31769	1755	98	61343	11758
PIPER PA36	302	0	57283	10111	30	36	1466	1243
PIPER PA38	1300	0	354688	73489	166	92	70331	25019
PIPER PA42	113	0	34855	4259	113	0	8519	1446
PIPER PA44	321	0	72940	12931	306	41	12809	3198
PIPER PA46	274	0	55674	5937	254	16	7435	1548
PR0PJT200	65	0	3491	728	37	5	128	62
RAVEN RX6	69	0	1412	281	٥	•	0	0
RAVEN S50	21	0	761	166	0	0	0	0
RAVEN S55	533	0	24971	4067	0	0	0	0
RAVEN SGO	219	0	10644	1546	0	•	0	0
RAVEN SGG	39	0	4301	1096	0	0	0	0
RKWELL500	34	0	6465	1020	28	ო	972	219
RKWELL700	21	0	4298	855	61	ო	2410	683
RKWELLNA265	299	0	80271	8584	299	0	17586	2694
ROBSINR22	221	0	51035	14395	151	24	10928	4775
ROLSCHLS	102	0	9166	1830	٥	•	0	0
RYAN ST3	6	0	3165	587	0	0	0	0

GENERAL AVIATION ANNUAL HOURS FLOWN BY WEATHER AND LIGHT CONDITIONS BY SOR MANUFACTURER/MODEL GROUP

				1987	•		PAGE	30 OF 32
		DAY	>			NIGHT		,
MANUFACTURER/ MODEL GROUP	NUMBER ACTIVE AIRCRAFT	STO	HOURS		NUMBER ACTIVE AIRCRAFT	STD	HOURS FLOWN	STD
RYAN STA	18	•	472	99	•	0	0	0
SAAB SF340	12	0	7320	1631	12	0	1880	ហ
SCHLERASK21	35	•	8718	1636	0	•	•	0
SCHLERASW15	32	0	1106	228	٥	0	•	0
SCHLERASW19	37	0	1063	213	0	0	0	0
SCHLERASW20	79	0	5567	1194	•	0	0	0
SCHLERKB	12	0	552	153	0	0	0	0
SCHLERKA6	48	0	1887	458	٥	0	0	0
SCWZERG164	151	0	32612	12531	0	0	0	0
SCWZERSG1	499	0	22747	3785	0	0	0	0
SCWZERSG2	401	٥	74722	14165	۰	•	0	•
SEMCO MODELT	7	0	21	•	0	0	•	0
SKRSKYS55	ın	ĸ	420	418	10	ហ	577	262
SKRSKYS58	30	0	4647	1113	27	4	595	322
SKRSKYS58T	6	0	6486	1462	61	0	1521	580
SKRSKYS61	13	0	5897	2289	0	•	0	0
SKRSKYS76	137	0	75516	20792	126	4	7139	3957
SLINDS 100	233	0	18370	3805	151	28	1775	817
SMITH 600	338	0	107516	34312	333	õ	49739	20289
SNIAS 350	218	0	69992	23756	152	47	5756	3827
SNIAS SA341	32	0	4064	1063	28	4	380	127
SOCATAMS894	34	0	5359	2567	25	so	182	69

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1987

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MANUFACTURER/ Model Group	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS	STD	NUMBER ACTIVE AIRCRAFT	STD ERROR	HOURS	STD
SOCATARALLYE	15	0	1026	101	13	-	122	37
SOCATATB10	26	٥	4552	885	26	0	1041	323
SOCATATB20	82	0	20377	7265	67	12	2784	1268
SPHRTHCIRRUS	62	•	4174	1265	0	0	0	0
SPHRTHNIMBUS	47	0	4084	593	0	٥	٥	•
SPHRTHVENTUS	45	0	7222	1460	0	o	0	0
STBROSSD3	20	0	22000	0	20	0	22000	•
STNS0N10	45	0	1992	582	12	Ø	62	37
STNSONL5	63	0	3048	766	11	យ	001	76
STNSONSR9	ഗ	0	138	34	7	+	מו	8
STNSONV77	38	0	1191	186	-	4	14	20
STOLAMRC3	7.7	0	2220	469	10	ဖ	37	29
SUPAC LA	27	0	1425	404	0	0	•	0
SUPAC V	80	0	16	27	•	٥	•	•
SWRNGNSA226	139	0	60297	17596	139	0	18006	2462
SWRNGNSA227	74	0	60207	15497	7.1	ĸ	15707	4609
SWRNGNSA26	81	0	15171	5012	70	11	3843	1255
TCRAFK21	21	0	1414	247	01	7	151	47
TCRAFKD	173	0	10902	2499	0	0	0	0
TCRAFTA	ო	0	258	•	0	0	0	0
TCRAFTBC	1021	0	82201	12934	121	62	2655	2001
TCRAFTBF	20	0	1324	306	0	0	0	٥

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GENERAL AVIATION ANNUAL HOURS FLOWN
BY WEATHER AND LIGHT CONDITIONS
BY SDR MANUFACTURER/MODEL GROUP
1987

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NIGHT

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NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES

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GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE 1987

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AIRCRAFT TYPE	¥	F COMMUN	VHF COMMUNICATIONS		TRANSP	TRANSPONDER EQUIPMENT	IPMENT	A.	PRECISION	APPROACH	EQUIPMENT	5
		420 420	2+ SYS	N N	4096 CODE	ALTIT	NO TRANS	LOCAL	MRKR	GL IDE SLOPE	MLS	NO
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS ESTIMATED POPULATION	33849	27835	10031	28138	28134	7477	50654	13651	7699	8744	Cac	10807
% STANDARD ERROR	2.6	3.5	9.	2.6	20.00	4.4	<u>-</u> ا	5.4	.0	7.7	38.7	1.0
% WITH CAPABILITY	38.6		11.4	32.1	32.0	œ .0	68.0	15.6	80	7.7	0.3	83.0
1 ENG: 4+ SEATS	;		1									
ESTIMATED POPULATION % STANDADD EDDOD	46436	81367	88673	2798	107485	65540	14001	90599	85182	79469	723	28105
% WITH CAPABILITY	38.2	67.0	73.0	. . .	88.0	53.9	. . .	74.6	70.	. 4.	0.0	23.1
) ENGINE: TOTAL												
ESTIMATED POPULATION	80285	109203	98704	30936	135619	73017	73654	104261	92882	86213	1007	100926
% STANDARD ERROR	# . 6 6 . 8	- و	- (6.0	1.7	4.4	- - (7.5	ب د د	21.3	T.
% WITH CAPABILITY	38.4	52.2	47.2	4	8.8	34.9	35.2	4 0 0 0	4.4	41.2	0.5	48.2
2 ENG: 1-6 SEATS												
ESTIMATED POPULATION	4426	14377	15952	451	17571	15451	625	17612	17533	16787	414	422
% STANDARD ERROR	0. 80	2.3	1 .6	23.4	0.7	- 8.	20.3	9 .0	0.7	1.2	31.7	14.7
% WITH CAPABILITY	24.3	79.0	87.7	5	96.6	84.9	Ø. ♣.	96 8	96.4	92.3	2.3	2.3
2 ENG: 7+ SEATS												
ESTIMATED POPULATION	1791	7542	7591	274	8713	8 169	425	8419	8395	8 168	157	640
% STANDARD ERROR % WITH CADARILITY	2. 6 0. 8	2.7.2	2 . cg	27.3	- # 0 .0	œ. q	20.e •	<u> </u>	4 0	æ s	* *	4.7.
)))			;	- - -	<u>.</u>		:	>
2 ENGINE: TOTAL FETTING FOR STITUM	7	9 6	00540	70	4000	10000	040	40000	000	4 0 0 0		6
% STANDARD ERROR	2	-	4	17.8	8		7 4	500	8 0	7 7 7 7	- ' ' ' '	2 6
% WITH CAPABILITY	22.7	80.2	86.1	2.7	96.2	86.4	ж С	95.2	9.40	91.3	2.1	<u>ල</u>
PISTON: OTHER												
ESTIMATED POPULATION	25	135	108	104	141	97	123	117	112	115	0	143
% STANDARD ERROR	#	25.9	29.9	34.2	24.3	33.4	27.7	28.6	28.8	28.9	0.0	23.7
% WITH CAPABILITY	9 .	51.	41.0	39.5	53.3	36.9	46.7	44.3	42.6	43.5	0.0	54.2
PISTON: TOTAL	0	90000		0	,		9		,		į	
ESITMATED FUPULATION % STANDARD FRROR	86527	131256	122355	37/65 65/65	152043	96735	74828	130408	118922	111282	1578	102131
% WITH CAPABILITY	36.5	55.	5.12	. 4 . 4	9 %	- Q	. . .	ה ה	20.0	47.0	ō C	L. L. 4.
)	1				D .) - ?	9) }	· •	

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1987

PAGE 2 OF 9

AIRCRAFT TYPE		VHF COMMUNI	#UNICATIONS		TRANSPO	TRANSPONDER EQUIPMENT	I PMENT		2	APPROACH	EQUIPMENT	•
	360 CH	360 720 CH CH	2+ SYS	N. K.	4096 CODE	ALTIT	NO	LOCAL	MRKR	GL IDE SLOPE	ALS	N I I S
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS ESTIMATED POPULATION % STANDARD FRROR	368	4537 1.6	4406	2 *	4739	4686	96 *	4747	4744	4699 8.0	4 *	* 22
% WITH CAPABILITY	7.7	95.0	92.3	0.5	99.2	98.1	8	99.4	89.3	98.4	6 .0	9 .0
2 ENG: 13+ SEATS ESTIMATED POPULATION	92	774	796	0	846	834	0	834	787	826	88	12
% STANDARD ERROR % WITH CAPABILITY	33.3 10.9	3.6 91.5	94.±	0.0	0.0 0.0	98.6 6.5	00	1.5 98.5	94.9	1.7	31.9	*
2 ENGINE: TOTAL ESTIMATED POPULATION	460	5311	5202	5	5585	5520	36	5580	5540	5524	142	39
% STANDARD ERROR % WITH CAPABILITY	20.5	4.1.4	92.5 92.5	* 0.0	0.0 99.4	98.2	* 9	99.3	98.6	98.9 98.3	30.7	* 0.7
TURBOPROP: OTHER	°C	***	683	ď	44	144	90	a	<u>,</u>	, G	œ T	70
% STANDARD FOR SERVICE	* ;	11.3	0.0	25.9	4.0	14.8	20.0	7.00	7.5	7.5	* *	10.1
A WITH CAPABILITY	* -	2	n †		30.6	D. / D	0 -	? . 00	? 0	? 0	•	
TURBOPROP: TOTAL ESTIMATED POPULATION	489	5489	5364	78	5730	5664	141	5746	5706	5690	160	119
% STANDARD ERROR % WITH CAPABILITY	19.8 8.3	93.5	91.4	30.9 -	0.7 97.6	96.9 96.5	26.5	9.7e	97.2	6 6 6 6 6 6	29.3 2.7	25.3
FIXED WING - TURBOJET												
2 ENGINE TURBOJET ESTIMATED POPULATION	319	3934	3835	ທ	4119	3992	7	4120	4115	4086	86	ဖ
% STANDARD ERROR % WITH CAPABILITY	24.8	1.6 95.3	2.0 93.0	* °	99.8 89.8	1.2 96.8	* 0.	0.2 99.8	0.2 99.7	99 0.50	40.3 2.1	* 0
TURBOJET: OTHER ESTIMATED POPULATION	151	476	524	8	603	576	9	55 85 8	524	526	ო	105
% STANDARD ERROR % WITH CAPABILITY	13.5 22.8	71.9	3.6 79.1	23.4 7.2	e. 06 9. 06	2.3 86.8	1.0 1.0 1.0	2.9 84.1	3.2	3.3 7.6.4	* 0	
TURBOJET: TOTAL ESTIMATED POPULATION	470	4411	4360	S.	4721	4568	8	4678	4639	4612	00 00	112
% STANDARD ERROR % WITH CAPABILITY	4.71	- 4	9.1.8	23.9	98.3	1.1	23.2	97.7	4.0	9.0 9.98	39.1 1.8	15.7
)) : :))	•) -

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1987

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PAGE

AIRCRAFT TYPE	¥	VHF COMMUN	UNICATIONS		TRANSP	FRANSPONDER EQUIPMENT	IPMENT	g.	ECISION	PRECISION APPROACH	EQUIPMENT	E
		720 CH	2+ SYS	S I	4096 CODE	ALTIT	TRANS	LOCAL	MRKR	GLIDE SLOPE	MLS	NO
FIXED WING: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	87486 1.7 35.3	141155 1.0 57.0	132079 0.9 53.4	31895 2.5 12.9	172495 0.6 69.7	106966 1.2 43.2	75036 1.3 30.3	140832 0.8 56.9	129267 0.9 52.2	121584 1.0 49. f	1826 14.9 0.7	102361 1.1 41.4
ROTORCRAFT												
PISTON ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1897 8 . 5 34 . 4	1467 10.7 26.6	567 19.5 10.3	2222 7.1 40.3	1498 9.8 27.2	471 20.3 8.6	4012 3.6 72.8	186 35.4 3.4	105 * 1.9	48.6 2.1	134 2. 4 4. 8	5182 1.7 94.1
TURBINE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1085 16.0 24.3	3240 5.5 72.7	2332 8.9 52.3	138 34.1 3.1	3271 5.8 73.4	1696 11.4 38.1	1187 16.0 26.6	1255 12.7 28.1	1002 13.5 22.5	1071 13.6 24.0	4 * 0 0 * w	3199 5.0 71.8
ROTORCRAFT: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	2982 7.9 29.9	4707 5.0 47.2	2900 8.1 29.1	2361 7.0 23.7	4768 5.0 47.8	2168 9.9 21.7	5200 4.6 52.2	44. 0.4.	13.2	1188 13.1	174 35.8 1.7	8382 2.2 84.1
OTHER ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	2299 8.7 23.6	2837 8.7 29.2	651 21.8 6.7	4703 8.3 8.3	391 27.7 4.0	227 37.8 2.3	9341 1.2 96.0	0 * 0 0 * 0	20 * 0.2	2. 0.2	0 * 0	9681 0.4 99.5
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	92767 1.7 34.7	148699 1.0 55.6	135630 0.9 50.8	38959 2.2 14.6	177655 0.6 66.5	109360 1.2 40.9	89576 1.2 33.5	142322 0.8 53.3	130394 0.9 48.8	122793 1.0 46.0	2010 13.8 0.8	120423 1.0 45.1

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE 1987

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AIRCRAFT TYPE		~	NAVIGATION	ON EQUIPMENT	ENT		LONG RA	LONG RANGE NAV	EQUIP	OTHER N	OTHER NAVIGATION EQUI	EQUIP
	VOR 100CH	VOR 200CH	2+ V0R	ADF	DME	RNAV	LORAN	OMEGA	OTHR LRNAV	RADAR ALTIM	WEATHER RADAR	NO NAV EQ
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS	254R1	24849	9597	7708	2259	487	7881	9	80	279	276	36190
% STANDARD ERROR	3.1	4.6	9	7.0	14.0	27.3	7.4	*	*	38.2	42.0	2.1
% WITH CAPABILITY	30.2	28.3	10.9	80	2.6	9.0	0.6	0.1	0.1	6.0 9	e. 0	41.2
1 ENG: 4+ SEATS												ļ
•	39057	86153	94948	86263	52641	14058	32844	426	319	3516	3774	3269
% STANDARD ERROR	7 9	1.2	o (- 6	- €	τυ 1 Ο α	e (32.4	98.0		. o . u	. 6
% WITH CAPABILITY	32.1	6.0/	7.8/	o .	4. D.	o -	0.77	* 5	ņ) 1	- •	•
1 ENGINE: TOTAL	1		1		4	l l	0.00	n A	000	3070	9	30456
ESTIMATED POPULATION	65538	111002	104545	- / B / B	00840	4040 0404	67/04	0 a c	2 - C	2000	500	2000
% STANDARD ERROR	3 6	23.6	- 05	44.9	26.2	0	4 00 0 10	0.7	0		on. ←	18.9
A WILL CAPASICITY		3	2			• :)	;	 - -			
2 ENG: 1-6 SEATS	4 4 4	14600	47220	16806	15469	7386	6864	104	197	3932	6777	214
ESTIMATED FORULATION	<u> </u>	14004	677/	-	- 4 - 4	, t) (1)	*	44.8	(C)	n T	17.6
% WITH CAPABILITY	22.6	80.7	94.7	91.3	85.0	40.6	37.7	9.0		21.6	37.2	1.2
2 ENG: 7+ SEATS ESTIMATED BOBIL ATTOM	1350	7704	8299	8246	8012	4491	3543	154	304	3262	4959	389
K STANDADD FEEDE	4 4 4	0.0	1.3	1.6	5.	5.7	80.	45.9	31.1	7.5	5.3	20.4
% WITH CAPABILITY	14.8	84.3	90.8	90.2	7.78	49.1	38.8	1.7	ო ო	35.7	54.3	4 .3
2 ENGINE: TOTAL					,	1	1	,		1		Ġ
ESTIMATED POPULATION	5465	ന	25529	24853	23480	11877	10407	2.2.5 2.2.5	000	י שר מי	1,30	, 603 603
% STANDARD ERROR	4.00	/ · 6	0 6 8 4	- 06 - 06		2 Kg	38.	9 60	9 60	26.3	42.9	6
)										
PISTON: OTHER	Ç	424	ă	104	44	c	4	ن	c	o	0	126
ESTIMATED PUPULATION	· *	75 7	- 60 - 00 - 00 - 00	4 05	r r *	c	29.1	0	0	0	0	27.0
% WITH CAPABILITY	4.	47.7	4.1	39.3	16.7	0.0	15.4	0.0	0.0	0.0	0.0	47.6
PISTON: TOTAL ESTIMATED POPULATION	71016	133514	130182	118928	78425	26422	51173	774	900	10989	15786	40187
% STANDARD ERROR	2.0	0.1	8.0	1.0	1.4	3.5	2.5	22.9	20.1	5.2	c . i	
% WITH CAPABILITY	30.0	56.4	55.0	50.2	33.1	11.2	21.6	e. 0	4.0	4 0	6.7	17.0

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE 1987

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AIRCRAFT TYPE		VOR A	NAVIGATION	N EQUIPMENT	ENT		LONG RA	RANGE NAV	EQUIP	OTHER !	NAVIGATION	N EQUIP
	YOR TOOCH	V0R 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NO NAV EQ
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS EXTIMATED DODINATION	345	4632	4748	4760	47.14	3769	1843	49.1	940	4208	4312	~
% STANDARD ERROR	25.0	- 6	0	ი 0	0.7	4.6	8	17.8	39.7	8 6		*
% WITH CAPABILITY	7.2	97.0	99.4	99.7	98.7	78.9	38.6	10.3	3.4	88	90.3	0.0
2 ENG: 13+ SEATS												
	64	795	836	846	787	291	122	138	54	523	749	0
% STANDARD ERROR	39.2	7.8	- 5	0.0	89	13.8	26.0	21.8	47.5	7.7	4 9	0.0
% WITH CAPABILITY	7.50	94.0	ω ω σ	0.0	 	34.4	14.4	 	9	. 10 80		o. o
2 ENGINE: TOTAL		1	,	!		,	!	,	,			ı
ESTIMATED POPULATION	409	5427	5583	5606	5502	4060	1965	629	202	4731	1905	7
% STANDARD ERROR	22.0	-	4.0	0	7.0	ო ო ქ	က (က (14.7	ص ص	2.2	5.0	* (
% WITH CAPABILITY	7.3	9e · 5	66 . 3	99.7	9. 9.	72.2	35.0	11.2	ල ල	84.2	90.0	0.0
TURBOPROP: OTHER	7	9	430	184	141	Ľ	90	37	7.2	122	0	œ
% STANDARD FREDR	63	23 0	16.1	8	15.7	*	*	*	34.6	21.0	29.3	13.5
A LITH CADARITY	22.7	43.5	in in	85.6	56.0	2 2	15.7	14.9	28.7	48.7	37.4	33.1
	•))) }	!	:	!	•		•		
TURBOPROP: TOTAL ESTIMATED POPULATION	465	5536	5722	5770	5642	4066	2004	999	274	4852	5154	85
% STANDARD ERROR	20.0	1.2	9.0	ტ	8.0	9.9	8.7	14.3	25.2	2.5	7.0	15.1
% WITH CAPABILITY	7.9	94.3	97.5	98.3	96.1	69.2	34.1	11.3	4.7	82.7	87.8	4
FIXED WING - TURBOJET												
2 ENGINE TURBOJET	c u	900	6		400	9	Ğ	0.40	0	9000	2607	u
ESTANDAD FEEDE	6 26	3 -	1 7	- 243		0 0 0 0		7 1 1 1 1	2,5	7	202.	*
% WITH CAPABILITY	1.0	97.1	95.1	95.3	97.2	4 7.5	21.8	. 85 . 60 . 60	20.0	95. 1	87.9	0.1
TURBOJET: OTHER												
ESTIMATED POPULATION	110	468	493	503	525	189	79	310	378	409	452	47
% STANDARD ERROR	18.9	4 .0	9. 6	3.4	9.0	12.7	20.7	5.7	5.7	හ ග	₩.	24.6
% WITH CAPABILITY	16.7	70.6	74.4	75.9	79.3	28.5	1 .8	46.7	57.0	61.7	68.2	7.0
TURBOJET: TOTAL	400	4444	8144	7424	46.26	644	Ç	2742	4004	4004	4039	E C
* STANDARD ERROR	- a	† - † -		* t	000	7 4 4	1000	4 4 7	, c		, c	26 90
% WITH CAPABILITY	7.0	93.4	92.2	92.6	94.7	4.8	20.5	57.2	25.1	90.08	85.2	-

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1987

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AIRCRAFT TYPE		VOR	NAVIGATION	ON EQUIPMENT	ŒNT		LONG R	LONG RANGE NAV	EQUIP	OTHER N	OTHER NAVIGATION EQUI	A EQUIP
	V0R 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NAV EQ
FIXED WING: TOTAL ES:IMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	71842 2.0 29.0	143523 1.0 58.0	140321 0.7 56.7	129132 0.9 52.2	88602 1.3 35.8	32634 2.7 13.2	54157 2.4 21.9	4182 5.7 1.7	2378 9.2 1.0	20176 2.9 8.2	25020 2.4 10.1	40324 2.1 16.3
ROTORCRAFT												
PISTON ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	484 8.8 8.8	517 20.4 9.4	60 * 1	205 30.5 3.7	57 * 1.0	0 * 1	613 18.4 11.1	000	000	at * 0 .0	4 * 6.	4139 3.6 75.1
TURBINE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	594 24.6 13.3	2064 9.9 46.3	1015 12.3 22.8	2557 8.0 57.4	903 12.1 20.3	480 23.7 10.8	2630 7.7 59.0	114 * 2.6	67 47.0 1.5	944 12.5 21.2	460 14.3 10.3	837 17.6 18.8
ROTORCRAFT: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1079 16.2 10.8	2581 8.9 25.9	1075 12.4 10.8	2761 7.8 27.7	960 12.2 9.6	2 4 93 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3243 7.1 32.5	4 * 1	67 47.0 0.7	959 8 . 8 8 . 6	4.4 4.4 8.	4976 4.2 49.9
OTHER ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	321 30.6 3.3	325 29.7 3.3	70 * 0 44 * 8	19 * 0.2	6 * 0 2 .	. 0 . 2	6. 6. 6.	4 1.0 1.0	0 * 1	4. 0 4.	15 0.2	9060 1.5 93.1
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	73242 2.0 27.4	146429 1.0 54.8	141449 0.7 52.9	131912 0.9 49.4	89581 1.2 33.5	33142 2.6 12.4	57461 2.3 21.5	4309 5.8 1.6	2457 9.0 0.9	21177 2.8 7.9	25509 2.4 9.5	54359 1.6 20.0

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 15

GENERAL AVIATION AVIONICS EQUIPMENT

BY

AIRCRAFT TYPE
1987
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AIRCRAFT TYPE				GUIDANC	SUIDANCE AND CONTROL EQUIPMENT	NTROL EQ	UIPMENT	!	1
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO LAND	NO EQUIP
1 ENG: 1-3 SEATS ESTIMATED POPULATION	1214	3749	258	4	405	354	134	=======================================	82840
% STANDARD ERROR % WITH CAPABILITY	19.7	0.4 0.8	41.2 0.3	* 0.0	31.6	37.5	* 0.0	* 0	9.0
1 ENG: 4+ SEATS ESTIMATED POPULATION	8191	21007	967	718	13734	25514	16094	800	59003
% STANDARD ERROR % WITH CAPABILITY	6.5	4.0	21.9	24.0 0.6	5.3 1.3	3.6	13.2	24.0	1.7
1 ENGINE: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	9406 6.2 4.5	24756 3.8 11.8	1225 19.3 0.6	761 23.3 0.4	14139 5.3 6.8	25868 3.6 12.4	16228 4.2 7.8	911 22.6 0.4	141842 0.8 67.8
2 ENG: 1-6 SEATS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	5560 5.7 31.1	9214 4.0 50.6	788 20.6 4.3	604 23.9 3.3	30.8 2.5	2122 12.7 11.7	13046 2.7 71.7	261 39.9 1.4	2112 11.3 11.6
2 ENG: 7+ SEATS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	4469 5.8 9.8	6198 3.5 67.8	451 28.1 4.9	238 41.2 2.6	69 * °.	182 44.9 2.0	6976 2.7 76.3	e * -	1304 8.7 14.3
2 ENGINE: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	10129 4.1 37.1	15412 2.8 56.4	1239 16.6 4.5	842 20.7 3.1	517 29.6 1.9	2304 12.2 8.4	20022 2.0 73.3	354 34.1	3416 7.8 12.5
PISTON: OTHER ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	000	33 * 12.3	00.00	000	000	000	22 49.8 8.5	æ 6, * .;	201 15.4 76.3
PISTON: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	19535 3.7 8.2	40201 2.6 17.0	2464 12.7 1.0	1603 15.5 0.7	14656 5.2 6.2	28172 3.4 11.9	36273 2.2 15.3	1272 18.8 0.5	145460 0.8 61.4

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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BY
AIRCRAFT TYPE
1987

AIRCRAFT TYPE				GUIDANCE	E AND CO	AND CONTROL EQUIPMENT	UIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO LAND	NO EQUIP
2 ENG: 1-12 SEATS ESTIMATED POPULATION	4410	4648	34.1	402	0	77	4327	202	ω
% STANDARD ERROR	1.7	0.	23.6	22.3	0.0	*	2.1	36.2	*
% WITH CAPABILITY	92.4	97.3	7.1	8.4	0.0	- .6	90'6	4.2	0.1
2 ENG: 13+ SEATS									
TIMATED	501	764	174	117	0	9	384	45	99
% STANDARD ERROR	7.2	3.7	18.8	24.1	0.0	*	10.2	0.64	37.7
% WITH CAPABILITY	59.2	90.4	20.5	13.9	0.0	8 .0	45.4	က (၁	7.9
2 ENGINE: TOTAL									
ESTIMATED POPULATION	4911	5412	515	520	0	84	4711	247	72
% STANDARD ERROR	1.7	0.1	16.9	18.1	0.0	*	2.1	31.0	36.8
% WITH CAPABILITY	87.4	96.3	9.	9.5	0.0	_	83.8	4.	د ه.
TURBOPROP: OTHER									
9	91	157	0	7	0	0	137	0	86
% STANDARD ERROR	29.1	11,4	0.0	*	0.0	0.0	16.6	0.0	15.7
% WITH CAPABILITY	36.5	62.8	0.0	0.8	0.0	0.0	54.9	0.0	34.4
TOT COORDINATION									
Ω.	5002	5569	515	522	0	84	4848	247	158
% STANDARD ERROR	1.7	4.0	16.9	18.1	0.0	*	2.1	31.0	18.8
% WITH CAPABILITY	85.2	94.9	80 80	80 00	0.0	1.4	82.6	4.2	2.7
2 ENGINE TURBOJET	4084	4006	570	833	α	č.	3817	4	:
% STANDARD FREDR	90	-	0,41	1.00	*) *	0.2	•	• *
% WITH CAPABILITY	0.66	97.1	13.8	20.2	0.2	8.0	92.5	0.1	0.3
TURBOJET: OTHER									
ESTIMATED POPULATION	472	492	91	122	4	9	439	ω	158
% STANDARD ERROR	3.2	3.5	23.2	17.8	*	*	3.7	*	10.4
% WITH CAPABILITY	71.1	74.2	13.7	18.4	9.0	6 .0	66.3	1.2	23.8
TURBOJET: TOTAL									
Ē	4556	4498	661	954	12	4	4256	49	169
% STANDARD ERROR	9 0	0	12.5	10.3	*	*	1.8	*	12.1
% WITH CAPALILITY	95.1	93.9	13.8	19.9	0.7	8.0	88.9	1.0	3.55

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT
BY
AIRCRAFT TYPE
1987

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AIRCRAFT TYPE		,		GUIDANC	GUIDANCE AND CONTROL EQUIPMENT	NTROL EQ	UIPMENT	1	
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	NO EQUIP
FIXED WING: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	29093 2.5 11.8	50268 2.1 20.3	3640 9.2 1.5	3078 9.2 1.2	14668 5.2 5.9	28297 3.4 11.4	45377 1.8 18.3	1569 16.1 0.6	145786 0.8 58.9
PISTON ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	5. 6.0	39 4.	, * o	4 + -	0 0	000	000	o 4 .	5403 0.8 98.1
TURBINE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	563 14.8 12.6	1225 10.6 27.5	90 34.5 2.0	33.3 3.3	, to	44.8 2.5	368 18.2 8.3	80 36.5	3174 4.1 71.2
ROTORCRAFT: TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	614 14.6 6.2	1264 10.5 12.7	97 35.2 1.0	151 33.0 1.5	<u> </u>	44.8 1.1	368 18.2 3.7	89 36.4 0.9	8577 1.6 86.0
OTHER ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	91 * 0 .9	37 * 0.4	12 * 0 . 1	15 0.2	000	* 0	* O	30 * 0.3	9596 0.6 98.6
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	29798 2.4 11.2	51569 2.0 19.3	3749 9.0 1.4	3244 8.9 1.2	14679 5.2 5.5	28408 3.4 10.6	45753 1.7 17.1	1688 15.2 0.6	163960 0.7 61.4

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

GENERAL AVIATION AVIONICS EQUIPMENT
BY
BASE STATE OF AIRCRAFT
1987

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STATE		VHF COMMUNI	MUNICATIONS		TRANSPONDER		EQUIPMENT	PRE	PRECISION A	APPROACH	EQUIPMENT	, ,
	360 CH	720 CH	2+ SYS	S VHF	4096 CODE	ALTIT	NO	LOCAL	MRKR	GL I DE SLOPE	MLS	NO 1LS
ALABAMA	100	4708	, ,	283	2047	1. 2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	762	1778	1634	1512	r.	946
A STANDADO FORDO	86, C CC	2 V	ָ ֓ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡ ֡	25, 7, 7,	141	, e	23.62	. R.	46.2	16.1) *	21 6
% WITH CAPABILITY	28.	80.8	54.0	12.5	72.9	42.2	27.1	63.3	58.2	53.8	1.2	33.7
ALASKA ESTIMATED DODIN ATTON	4725	3658	2150	CRC	3049	069	20 20 20 20 20	2369	989	1502	44	6152
% STANDADD FREDRE	2 0	100	13.0	25.5	11.0	22.4	7.9	11.9	13.3	9.4	* *	7.6
% WITH CAPABILITY	54.3	42.0	24.7	6.7	35.0	7.9	65.0	27.2	22.9	17.3	0	70.7
ARIZONA ESTIMATED POPULATION	1996	3653	3291	806	4416	2684	1869	3279	3075	2570	4	2922
% STANDARD FREDR	14.5	11.0	11.7	21.5	6.6	12.7	14.3	9.1	11.9	13.1	*	11.7
% WITH CAPABILITY	31.8	58.1	52.4	12.8	70.3	42.7	29.7	52.2	6.8	6.04	0.7	46.5
ARKANSAS ESTIMATED POPIE ATTON	725	1562	1516	633	1846	879	086	1516	1286	1282	90	1306
S CTANDADA RODGO		7 7 7	, q	25 A	7. 4.	90.00	21.0	16.7	17 9	α	*	4 8
% WITH CAPABILITY	25.7	55.3	53.7	22.4	65.3	31.1	34.7	53.6	44.8	45.4	4.	46.2
CALIFORNIA ESTIMATED POPULATION	11765	22673	19083	3622	26366	17976	88 88 88	20981	18853	18149	173	14827
% STANDARD ERROR	5.7	4.2	4,5	න න	89.	4.6	0	4.3	4.0	4.6	42.2	5.0
% WITH CAPABILITY	32.5	62.5	52.6	10.0	72.7	49.6	27.3	57.9	52.0	50.1	0	40.9
COLDRADO ESTIMATED POPULATION	2054	2923	2785	628	3544	2227	1583	2677	2494	2271	8.	2351
% STANDARD ERRUR % WITH CAPABILITY	40.4	57.0	54.3 54.3	25.2 12.3	69.1	43.4	30.9	52.2	48.6	44.3 6.3	* °°	45.8
CONNECTICUT	709	15.48	1486	123	1645	1282	n Tu	1472	1370	1356	9	724
* CTANDADO EDDOD	2 P. P.	17.1	17 4) ! *		18	26.7	17.5	18.3	18.2	*	23.5
% WITH CAPABILITY	28.5	70.5	67.7	5.6	74.9	58.4	25.1	67.0	62.4	61.7	8.0	33.0
DELAWARE	7	4	Q Q	40	9	8	081	a A	779	753	c	702
EDITATION TOTOUR : ACT	400	ָ פֿ פֿ	מני	<u>.</u>	, ,	2000	*	2000	22.20	24.4) c	. n
% WITH CAPABILITY	40.8	58.1	61.4	8. 61	86.7	6.59	13.3	80.5	73.5	71.0	0.0	19.5

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	VHF	VHF COMMUNI	UNICATIONS		TRANSPO	TRANSPONDER EQUIPMENT	IPMENT	PRE	PRECISION /	APPROACH	EQUIPMENT	
	ı	720 CH	2+ SYS	N VHF	4096 CODE	ALTIT	NO	LOCAL	MRKR	GL I DE SLOPE	MLS	NO ILS
D.C. ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	15.1	55 * 82.5	38 * 57.1	* 4 0 * 4	52 * 78.2	59. 8.	15 * 21.8	51 * 76.0	42 * 63.1	51 0.97	000	16 * 24.0
FLORIDA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	4284 10.0 28.6	10919 6.1 72.8	8677 6.8 57.8	958 19.1 6.4	11847 5.8 79.0	7991 7.0 53.3	3158 11.3 21.0	9749 6.4 65.0	9186 6.6 61.2	8796 6.7 58.6	06 * °	4985 9.2 33.2
GEORGIA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1791 15.6 31.5	3505 11.2 61.7	3365 11.3 59.2	647 23.1 11.4	3997 10.4 70.3	2386 13.3 42.0	1688 15.5 29.7	3481 11.1 61.2	3197 11.5 56.2	3158 11.6 55.6	36 6 6	2184 14.0 38.4
HAWAII ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	175 43.2 24.7	489 30.1 68.9	337 33.8 47.5	51 7.2	584 26.8 82.3	370 32.5 52.1	125 * 17.7	290 35.8 40.9	240 39.9 33.8	265 38.2 37.4	000	411 33.0 57.9
IDAHO ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	978 21.0 38.4	1103 19.7 43.3	1106 20.1 43.4	538 29.6 21.1	1591 16.9 62.5	828 23.0 32.5	955 20.9 37.5	1077 20.1 42.3	1059 20.5 41.6	1000 21.1 39.2	* 0 4 * ±	1363 18.0 53.5
ILLINDIS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	2701 13.0 30.7	5281 9.0 59.9	5030 9.3 57.1	1274 17.3 14.5	6047 8.4 68.6	3573 10.8 40.6	2763 12.3 31.4	5135 9.1 58.3	4681 9.5 53.1	4377 9.8 49.7	000	3532 10.9 40.1
INDIANA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1877 15.8 39.5	2637 12.9 55.5	2686 12.7 56.5	570 25.0 12.0	3407 11.4 71.7	2168 14.1 45.6	1345 17.4 28.3	2602 12.9 54.8	2428 13.3 51.1	2157 14.1 45.4	4.0 4.0	2150 14.2 45.2
IOWA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	787 24.1 23.6	1967 15.1 59.1	1640 16.3 49.3	724 22.2 21.8	2128 14.5 63.9	1429 17.7 43.0	1200 18.0 36.1	1771 15.9 53.2	1745 16.1 52.4	1678 16.4 50.4	56 * 1.7	1514 16.3 45.5

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT
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STATE	VHF	VHF COMMUNICATIONS	CATIONS		TRANSPONDER	NDER EQU	EQUIPMENT	PRE	PRECISION	APPROACH	EQUIPMENT	-
	360 CH	720 CH	2+ SYS	N PHY	4096 CODE	ALTIT ENCODE	NO TRANS	LOCAL	MRKR	GL IDE SLOPE	MLS	NO ILS
KANSAS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1709 15.9 36.9	2062 14.4 44.5	2213 13.9 47.8	1033 20.3 22.3	2692 12.7 58.1	1398 16.8 30.2	1939 4 1 . 8 9 . 1	2109 14.2 45.5	2154 14.0 46.5	1908 14.8 41.2	4 * 0.	2348 13.5 50.7
KENTUCKY ESTIMATED POPULATION % STANDARC ERROR % WITH CAPABILITY	606 27.4 32.2	1158 19.2 61.4	1238 18.7 65.7	285 37.0 15.1	1294 18.2 68.7	695 24.7 36.9	590 26.1 31.3	1016 21.0 53.9	915 22.0 48.6	942 21.7 50.0	20 * 1.1	837 21.7 44.4
LOUISIANA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1055 20.5 28.3	2380 13.7 63.8	2070 14.6 55.5	438 32.6 11.7	2439 13.4 65.3	1648 16.2 44.2	1293 18.7 34.7	1919 4.19 4.13	1667 15.7 44.7	1563 16.4 41.9	0 * 23 0.6	1758 16.1 47.1
MAINE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	507 29.9 32.9	749 24.4 48.6	618 27.0 40.1	324 35.1 21.0	781 24.0 50.7	504 30.2 32.7	760 23.5 49.3	616 27.3 40.0	555 28.8 36.0	558 28.5 36.5	e * 6.	920 21.4 59.7
MARYLAND ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1395 18.2 43.2	1673 15.9 51.8	1924 15.0 59.6	387 31.7 12.0	2425 13.5 75.0	1638 16.3 50.7	807 21.9 25.0	1848 15.5 57.2	1583 16.5 0.04	1628 16.4 50.4	4 * 6.	1374 17.3 42.5
MASSACHUSETTS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1480 17.3 37.6	2262 13.7 57.5	2055 14.6 52.2	347 34.6 8.8	2960 12.2 75.2	2049 14.6 52.1	975 20.1 24.8	2241 13.8 56.9	2071 14.5 52.6	1961 14.9 49.8	e * c	1648 16.1 41.9
MICHIGAN ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	2950 12 4 34 7	4996 9.3 8.3	4621 9.6 54.4	1274 18.2 15.0	5710 8.7 67.2	2998 11.5 35.3	2783 12.3 32.8	4481 9.7 52.8	4248 9.9 50.0	3895 10.3 45.9	98 * 1.	3864 10.6 45.5
MINNESOTA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	2462 13.3 43.0	2138 13.8 37.3	2082 14.5 36.3	1421 17.2 24.8	2917 12.3 50.9	1396 17.1 24.4	2810 12.0 49.1	1960 14.8 34.2	1889 15.0 33.0	1613 16.2 28.2	38 * 0.7	3642 10.7 63.6

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	VHF	VHF COMMUNI	MUNICATIONS	!	TRANSP	TRANSPONDER EQUIPMENT	IPMENT	PR	PRECISION /	APPROACH	EQUIPMENT	
	;	720 CH	2+ SYS	8 Y	4096 CODE	ALTIT	NO TRANS	LOCAL	MRKR	GL IDE SLOPE	MLS	NO ILS
MISSISSIPPI FOTTMATED DODUM ATTON	80	1311	792	429	1339	200	970	1063	066	1012	59	1243
% STANDARD ERROR	25.6	٠.	23.0	32.1	18.1	24.8	21.9	20.2	21.0	20.9	*	. et
% WITH CAPABILITY	29.8	56.8	34.3	18.6	58.0	30.3	45.0	46.0	42.9	43.8	ب ق	53.9
MISSOURI FETTWATED POPULATION	2000	2416	2604	1084	3091	1982	2124	2672	2258	2107	5	2496
% STANDARD ERROR	14.8	13.2	12.9	20.5	11.7	14.6	14.4	12.7	13.7	14.2	*	13.2
% WITH CAPABILITY	38.4		49.9	20.8	59.3	38.0	40.7	51.2	43.3	40.4	0.7	47.9
MONTANA ESTIMATED POPULATION	929	956	800	748	1294	779	1263	825	741	780	0	1683
% STANDARD ERROR	22.6	22.3	24.2	24.8	0.61	24.4	19.2	23.7	25.0	24.4	0.0	16.7
% WITH CAPABILITY	36.3	37.4	31.3	29.3	50.6	30.5	49.4	32.3	29.0	30.5	0.0	65.8
NEBRASKA ESTIMATED POPULATION	798	1054	1024	728	1359	775	1185	1072	923	8 4 8	2	1416
% STANDARD ERROR	23.7		21.0	25.0	18.3	23.7	19.1	20.6	21.9	22.9	*	17.5
% WITH CAPABILITY	31.4	41.4	40.2	28.6	53.4	30.5	46.6	42.1	36.3	33.3	O .53	55.7
NEVADA ESTIMATED POPULATION	735	1445	1110	189	1627	1172	640	1188	1019	096	8	1071
% STANDARD ERROR	24.7	17.4	19.4	32.0	16.2	19.2	24.4	18.8	19.8	20.5	*	19.6
% WITH CAPABILITY	32.4	63.7	49.0	6 0	71.8	51.7	28.2	52.4	45.0	42.3	8.0	47.2
NEW HAMPSHIRE												
ESTIMATED POPULATION	584	875	791	123	066	680	529	898	878	820	~	574
% STANDARD ERROR	27.5	22.3	23.9	*	21.3	25.7	27.1	22.5	22.7	23.2	*	26.1
% WITH CAPABILITY	38.4		52.1	8 9	65.2	44.8	34.8	59.1	57.8	54.0	0	37.8
NEW JERSEY ESTIMATED POPULATION	1562	2451	2789	542	3261	2511	1151	2783	2537	2393	124	1596
% STANDARD ERROR	16.9		12.3	25.6	11.4	12.9	18.8	12.3	12.8	13.2	*	16.3
% WITH CAPABILITY	35.4	55.6	63.2	12.3	73.9	56.9	26.1	63.1	57.5	54.2	2.8	36.2
NEW MEXICO ESTIMATED POPULATION	857	1343	1341	99	1747	1084	795	1346	1250	111	30	190
% STANDARD ERROR	22.5		18.1	31.8	16.2	20.2	21.5	18.2	18.8	20.0	*	18.7
% WITH CAPABILITY	33.7	52.8	52.7	15.6	68.7	42.6	31.3	53.0	49.2	43.7	7.2	46.8

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE		2	UNICATIONS		TRANSPO	TRANSPONDER EQUIPMENT	I PMENT	A A	CISION	PRECISION APPROACH	EQUIPMENT	E
	98 GE	720 GF	2+ SYS	S H	4096 CODE	ALTIT	NO	LOCAL	MRKR	GLIDE	MLS	NO 1LS
NEW YORK			i i	9	,			,			8	
ESTIMATED POPULATION	23/1	41/6	37.28	1362	1 2 3 4 C	3164	b/ b7	40.4	3/80	25.05	D -	3082
	13.4	10.1	70.	- e	8.5	÷ :	12.4	0.0	6. 5 10. 5	2 ·	* ,	. I.
% WITH CAPABILITY	31.8	20°.0	50.4	. 33 . 33	8. 99	42.4	33.2	55.7	50.7	47.4	7.5	41.3
ANT CABO TIMA												
ESTIMATED POPULATION	1472	3547	3432	531	4257	2634	1144	3456	3192	3031	=	1936
% STANDARD ERROR	17.2	10.9	11.2	27.9	10.0	12.5	8.	11.2	11.6	11.9	*	4.6
% WITH CAPABILITY	27.3		63.5	6 0	78.8	8.8	21.2	64.0	59.1	56.1	0.5	35.8
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												
ESTIMATED POPULATION	804	448	632	520	8 15	478	828	589	565	413	Ø	1104
% STANDARD ERROR	24.0		27.7	30.7	24.1	31.5	22.3	28.4	29.0	34.0	*	20.5
% WITH CAPABILITY	46.1	25.7	36.3	29.8	46.7	27.4	53.3	33.8	32.4	23.7	o .s	63.3
CHIC												
ESTIMATED POPULATION	3038	5129	4972	1253	5970	3986	2967	5179	4924	4690	142	3646
% STANDARD FREDR	12.0		e e	18.	(C)	10.2	5	6	6	4	6.0	10.9
% WITH CAPABILITY	34.0	57.4	55.6	14.0	8.8	44.6	33.2	57.9	55.1	52.5	9.	40.8
OKLAHOMA	,			ļ	,			1	,	!		
ESTIMATED POPULATION	1882	2355	2290	722	3231	1759	1496	2538	2286	2067	0	2101
% STANDARD ERROR	15.7		13.7	23.7	11.7	15,4	17.1	13.2	13.8	14.6	0.0	4.4
% WITH CAPABILITY	39.8	49.8	48.4	15.3 E.3	68.3	37.2	31.7	53.7	48.4	43.7	o. 0	44.5
NOSEGON												
ESTIMATED POPULATION	1681	2947	2264	733	3286	1871	18 15	2563	2368	2182	0	2428
% STANDARD ERROR	16.1		13.8	23.8	11.6	15.2	15.0	12.9	13.6	14.0	0	13.4
% WITH CAPABILITY	33.0	57.8	4.4	14.4	64.4	36.7	35.6	50.2	46.4	42.8	0.0	47.6
PENNSYLVANIA												
ESTIMATED POPULATION	2512	4368	3576	1060	4867	3349	2439	4006	3394	3387	4	3242
% STANDARD ERROR	12.9		10.7	18.1	60	10.9	12.3	10.2	10.9	10.9	*	10. 9
% WITH CAPABILITY	34.4	99 8.	49.0	14.5	86.6	45. 8	33.4	54.8	4 6.5	46.4	0.	4.4
RHODE ISLAND												
ESTIMATED POPULATION	129		288	19	346	236	71	303	286	248	0	113
% STANDARD ERROR	*	0.0	41.2	* ,	37.1	455	* !	39.7	4 0.9	4 3.0	0	* (
% WITH CAPABILITY	30.8	65.2	69.2	4. v	83.0	26.7	17.0	72.8	9 9 9	 	o 0	27.2

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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GENERAL AVIATION AVIONICS EQUIPMENT BY BY 1987

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STATE		VHF COMMUNI	AUNICATIONS		TRANSPONDER		EQUIPMENT	PRE	PRECISION A	APPROACH	EQUIPMENT	-
	360 CH	720 CH	2+ SYS	S X	4096 CODE	ALTIT	NO	LOCAL	MRKR BECN	GL IDE SLOPE	MLS	ND 11.S
SOUTH CAROLINA	C	****		900	i	700	40	45.5	4	1127	·	833
K CTANDADO FODOD	20 46 20 46	σ - σ	- C	33.2	7 2 2	217	20.00	, c	9 6	6 61	٠.	22.5
% WITH CAPABILITY	30.3	52.1	51.8	18.3	69.1	42.4	30.9	60.1	53.5	51.6	0.1	38.1
SOUTH DAKOTA FSTIMATED POPULATION	415	436	475	570	10 44 65	179	874	557	456	454	0	857
% STANDARD ERROR	32.0	32.5	30.8	28.2	29.1	49.4	22.4	29.0	32.0	32.1	0	22.4
% WITH CAPABILITY	29.3	30.8	33.5	40.3	38.3	12.6	61.7	39.3	32.2	32.1	0.0	60.5
TENNESSEE ESTIMATED POPULATION	1240	2263	2335	439	3080	1598	546	2435	2379	2248	ហ	1169
% STANDARD ERROR	19.1	9.6	13.7	30.6	12.0	16.3	26.6	13.2	13.4	13.7	*	20.1
% WITH CAPABILITY	34.2	62.4	64.4	12.1	84.9	44.1	15.1	67.2	65.6	62.0	0.1	32.2
TEXAS	9000	43,403	1010	22.50	47.00	P 8 9 0	7030	11024	•	10634	2£7	0417
ESTIMATED FORCEALTON	9 1	3 6	2 6	2) L		2 1	10	- 4	5	֝֝֓֞֜֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	- 0
% STANDARD ERRUR % WITH CAPABILITY	33.1	ກ ເນື່ອ ເກື່ອ	U 4	- 4	67.8	44 5. 4.	32.2	54.0 7.0	n 00	. 64	55. £	43.0
	-)	,	:)	•	! !) }	:) :	• • •
UTAH ESTIMATED POPULATION	382	917	749	81	997	623	355	772	708	669	8	540
% STANDARD ERROR	35.8	21.0	22.6	*	20.3	24.5	36.1	22.6	23.0	23.7	*	29.6
% WITH CAPABILITY	28.3	67.9	55.4	0.9	73.8	46.1	26.2	57.1	52.4	51.7	0.1	39.9
VERMONT ESTIMATED POPULATION	329	379	310	120	441	103	295	353	317	280	0	381
% STANDARD ERROR	34.9	33.4	37.4	*	31.1	*	35.4	35.3	37.3	38.9	0.0	31.2
% WITH CAPABILITY	44.6	51.4	42.0	16.3	59.9	4.0	40.1	47.9	43.0	38.0	0.0	51.7
VIRGINIA ESTIMATED PODIII ATTON	1571	1911	2092	403	2609	1688	1080	2181	2036	1943	<u>.</u>	1445
* CTANDADA EDDOD	, ,	14	14	30.0	10 7	, r,	8 9	- K	14.2	14 6	! *	17.0
% WITH CAPABILITY	42.6	51.8	26.7	6.0	70.7	45 8	29.3	59.1	55.2	52.7	1.4	39.2
WASHINGTON	,			!		,	,				;	
ESTIMATED POPULATION	3194	3700	3288	1357	4259	2350	3346	3468	3022	2829	42	3832
% STANDARD ERROR	9.5	10.8 8.9	5.5	17.8	10.1	13.5	11.2	17.3	12.0	12.5	* (10.5
% WITH CAPABILITY	42.0	48.7	43.2	17.8	26.0	30.8	44.0	45 0.0	39.7	37.75	<u>ه</u> ٥	50. 4

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT

BY

BASE STATE OF AIRCRAFT

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STATE		VHF COMMUNI	CATIONS		TRANSP	FRANSPONDER EQUIPMENT	IPMENT	PRE	PRECISION A	APPROACH	EQUIPMENT	
	8 3	720 CH	2+ SYS	S X	4096 CODE	ALTIT ENCODE	NO	LDCAL	MRKR	GLIDE SLOPE	MLS	NO 1LS
WEST VIRGINIA ESTIMATED POPULATION	560	589	549	138	733	435	467	631	909	538	8	527
% STANDARD ERROR	29.5	27.7	28.9	*	25.2	31.9	30.8	27.1	27.6	29.2	*	29.2
% WITH CAPABILITY	46.7	49.1	45.7	1.5	61.1	36.2	38. 8	52.5	50.5	4 4 8 . 8	0.7	6 .00
WISCONSIN FETTMATED BOBILL ATTON	2052	2316	2414	1211	3151	1618	2307	25.42	2452	2175	ប	2770
% STANDARD FREDR	15.0	4.	13.3	00	11.7	16.2	13.6	12.9	13.2	13.9	*	12.6
% WITH CAPABILITY	37.6	42.4	44.2	22.2	57.7	29.6	42.3	46.6	44.9	39.9	0.7	50.7
WYDMING												
ESTIMATED POPULATION	280	676	236	165	761	375	354	29 3	497	510	0	498
% STANDARD ERROR	39.0	25.5	28.4	*	24.3	33.5	36.0	27.3	29.5	29.3	o	30.6
% WITH CAPABILITY	25.1	60.6	48.1	14.8	68.3	33.7	31.7	53.2	44.5	45.7	0.0	44.7
PUERTO RICO	!	,	į	;	;	į		!	;	,	•	1
ESTIMATED POPULATION	167	239	244	8.4	322	147	132	278	244	256	Ν,	
% STANDARD ERRUR	# {		0.1	*	ני פי	* ;	9	32.3	- 1 - 1 - 1	9 · 0	* (đ (
% WITH CAPABILITY	36.7	52.6	53.6	19. 1	9. O.	31.1	29.1	61.1	53.7	56.4	0.5	37.6
OTHER U.S. TERRITORIES	7		,	(,	ć	,	,	ţ	(;
S CTANDED FORDLAILUN	†	<u>.</u>	\? -	າ ,	2	<u>}</u>	9 4	* *	<u> </u>	77	, ,	•
% STANDARD ERRUR % WITH CAPABILITY	* 61 73.51	80.4	78.5	* ~	82.7	61.3	17.3	76.6	68.1	72.5	, 1.	23.4
TOTAL FETTMATED BOBIII ATTON	42767	148699	135630	28959	177655	109360	89576	142322	130394	122793	2010	120423
% STANDARD ERROR	7.	0	6000	2.2	90	1.2	1.2	8 0	6		13.8	0
% WITH CAPABILITY	34.7	55.6	50.8	14.6	66.5	40.9	33.5	53.3	48.8	46.0	8.0	45.1

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE		VOR	NAVIGATION	N EQUIPMENT	ENT	,	LONG R	RANGE NAV	EQUIP	OTHER N	NAVIGATION EQUIP	N EQUIP
	708 H	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NO NAV EQ
ALABANA ESTIMATED DODIN ATTOM	8.40	1584	1850	1481	1112	513	200	22	ď	350	80 10 10	406
K STANDARD FREDR	23 7	4 8	16.3	17.	0.61	26.4	24.6	! *	*	30.6	29.4	30.2
% WITH CAPABILITY	30.0	56.4	59.1	52.7	39.6	18.2	24.9	2.6	0	12.8	13.7	14.5
ALASKA ESTIMATED BOBIII ATTOM	4112	2638	2083	4126	982	222	1667	9	102	209	163	1409
% STANDARD FREDR	. 6	11.3	13.5	(F)	19.2	40.3	14.3	*	*	37.1	*	17.2
% WITH CAPABILITY	47.3	30.3	24.0	47.4	11.3	5.6	19.2	0.7	1.2	7.7	.	16.2
ARIZONA ESTIMATED DODIN ATTOM	7	26.40	2263	2070	2246	o u	CCA	6	90	488	358	1283
* STANDADD FDDOD	, d	4 4 40	11 7	12.1	14.0	25 1	23.4	47 1) • *	27.5	31.9	10.3
% WITH CAPABILITY	26.6	56.4	51.7	47.3	35.7	11.0	13.1	£.	4.0	7.7	5.7	20.6
ARKANSAS ESTIMATED BOBIL ATTOM	ď	a a	127	4486	477	978	ж С	r.	43	2.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8	409	7.18
% CTANDADD FDDDD	28.5	σ	 		8 6	3.00	22.2	4	37.9	30.8	27.9	24.0
% WITH CAPABILITY	21.2	59.5	55.6	52.6	34.6	8.	28.7	2.0		6.0	14.5	25.4
CALIFORNIA ESTIMATED DODIN ATTOM	o Cu	21021	20230	4882	12380	4007	830 1	880	369	1973	1001	6227
S STANDADD FOODD	- מ ה ה	- C V	40430	200		, t	a a	24.2	20 C	5.5	- 6	7.
% WITH CAPABILITY	26.2	60.5	55.8	. 6 . 5	34.	1.7	17.6	8	0	R 4	2.5	17.2
COLORADO ESTIMATED DOBIN ATTON	1528	2792	2725	2421	1721	516	008	62	2	272		1134
% STANDARD FREDR	17.4	12.4	12.6	13.2	4 6	27.1	23.4	*	* *	32.5		17.9
% WITH CAPABILITY	29.8	54.4	53.1	47.2	33.6	10.1	15.6	1.2	6.0	1 0	7.7	22.1
CONJECTION ESTIMATED POPULATION	548	1563	1573	1491	668	299	622	4	5	140	161	218
% STANDARD ERROR	27.7	17.1	17.0	17.5	21.8	36.1	26.4	*	*	42.4	43.7	38.2
% WITH CAPABILITY	25.0	71.2	71.6	67.9	6.04	13.6	28.3	6 .	0 4	0	7.3	ග. ග
DELAWARE ESTIMATED POPULATION	203	782	789	707	582	236	326	7	8	143	149	127
% STANDARD ERROR	48.1	23.7	23.6	24.5	26.6	39.3	36.0	*	*	46.3	47.4	*
% WITH CAPABILITY	19.1	73.7	74.4	66.7	54. 9	22.2	30.8	0.7	2.9	13.5	14.1	12.0

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT BY BASE STATE OF AIRCRAFT 1987

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STATE	,	VOR N	NAVIGATION EQUIPMENT	N EQUIPM	ENT		LONG RANGE	MGE NAV	EQUIP	OTHER N	OTHER NAVIGATION EQUI	N EQUIP
	00€ 100€ 100€	Ñ	2+ V0R	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NAV EQ
D.C. ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	20 0.0 99.8	\$1 * 76.0	42 * 63.1	4 * 3. 4 * 6. 5 * 6.	4.2 83 + 4.2	000	23 * \$2	0.00	0 0 0 0 0 0	23	23 * 1 23	
FLORIDA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	3211 11.5 21.4	9808 6.53 8.33	8397 6.6 60.08	8934 6.6 59.5	6572 7.6 43.8	2269 12.8 15.1	4777 9.1 31.8	28.4	36.2 0.9	1796 13.3	2672 10.7	2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
GEORGIA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1334 18.4 23.5	3512 11.2 61.8	3522 11.1 62.0	2876 12.2 50.6	2006 14.4 35.3	699 23.1 12.3	1817 15.4 32.0	43.5 7.7	* ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	663 22.9 11.7	654 22.3 11.5	6 6 6 7 7 7 3 8 6 8 5 7 7 3 8 6 8 5 7 7 3 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
HAWAII ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	143 * 20.2	467 31.0 65.9	251 38.7 35.4	306 37.2 43.1	192 42.5 27.1	69 7.9		ဖ ့ (၁	. o ss	06 * 4 6. 4	4 * r. 6 * 0.	120 * 16.9
IDAHO ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	848 23.1 33.3	1215 19.0 47.7	1245 19.1 48.9	1089 20.3 42.7	546 27.8 21.4	353 34.6 13.9	468 31.0 18.4	4 * .	4 * - ñ	80 * 44 & &	ក * 4. ក្ * ក	588 27 3 23 1
ILLINDIS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1874 15.5 21.3	5523 8.8 62.7	5218 9.1 59.2	4538 9.7 51.5	3517 10.8 39.9	1206 17.5 13.7	2432 13.3 27.6	188 35.4 2.1	80 0.45 0.4-	829 18.6 9.4	1180 16.9	1560 15.6 17.7
INDIANA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1211 19.2 25.5	2845 12.6 59.9	2749 12.6 57.8	2419 13.3 50.9	1711 15.4 36.0	691 22.5 14.5	1217 19.5 25.6	90 35.0 .s		572 23.3 12.0	509 24.3	888 20.7 18.7
IDWA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	793 24.2 23.8	1789 15.7 53.8	1764 15.9 53.0	1768 16.0 53.1	1280 18.5 38.5	425 31.1 12.8	704 25.6 21.2	4 * 1.2 2.1	۳ - 0	34.2 0.0 0.0	466 29.2 14.0	743 21.4 22.3

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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GENERAL AVIATION AVIONICS EQUIPMENT
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STATE		XOX	MOT CASTAGE				201	TOTAL NAME INC.				LICE TO LOS LANGES
	100CH	~	2+ VOR	ADF	OME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NAV EQ
KANSAS ESTIMATED POPULATION	1148	2405	2. 7.85	3226	1366	738	0	ç	Ş	C	4	6
% STANDARD ERROR	19.1	13.6	14.0	13.8	9 9	22.8	22.1	· *	48 1	3. LS	4000	1233
% WITH CAPABILITY	24.8	51.9	47.2	48.1	29.5	15.9	19.8	0.8	2.2	7.0	7.7	26.6 26.6
KENTUCKY												
ESTIMATED POPULATION	496	1136	1137	1061	636	226	411	67	α	192	268	383
% STANDARD ERROR	34.55	19.3	20.0	19.7	25.9	40.0	29.4	*	*	41.8	36.2	31.3
% WITH CAPABILITY	26.3	60.3	60.3	56 .3	33.7	12.0	21.8	3.5	4.0	10.2	14.2	20.3
LOUISIANA												
ESTIMATED POPULATION	583	2008	1819	2164	1165	379	1272	19	7	330	388	748
% STANDARD ERROR	26.6	14.6	15.2	14.1	18.3	30.6	19.1	*	*	29.5	27.9	24.2
% WITH CAPABILITY	5.6	53.8	48.7	58.0	31.2	10.2	34.1	0.5	0.1	φ. φ	10.7	20.0
MAINE												
ESTIMATED POPULATION	502	622	624	703	277	75	318	0	7	36	79	408
% STANDARD ERROR	30.1	26.7	26.9	25.6	39.1	*	35.8	0.0	*	*	*	31.3
% WITH CAPABILITY	32.6	40.4	40.5	45.6	17.9	4.	20.7	0.0	0.1	8.3	5.7	26.5
MARYLAND												
ESTIMATED POPULATION	1014	1837	2003	1756	986	368	661	25	12	168	252	519
% STANDARD ERROR	21.3	15.3	14.8	15.8	20.6	32.1	26.1	*	*	45.2	37.1	26.9
% WITH CAPABILITY	31.4	56.9	62.0	54.3	30.5	12.2	20.5	8	4.0	5.2	7.8	16. 1
MASSACHUSETTS												
ESTIMATED POPULATION	1136	2288	2279	2196	1362	473	1498	53	17	366	282	555
% STANDARD ERROR	20.2	13.7	14.1	14.2	17.6	28.7	17.2	*	*	31.8	34.3	25.1
% WITH CAPABILITY	28.9	58.2	57.9	55.8	34.6	12.0	38.1	7.3	4 .0	6. e	7.2	14.1
MICHIGAN ESTIMATED PODE ATTOM	i c	i i	9		1			,	,			
W CTANDADD FORDER	707	6070	ה ה ה	43.10 0.00	19/7	040	2168	232	129	828	1031	1590
A STANDARD ERROR	14.	. S. S.	n ;	30 ·	12.0	9	14.3	30.8	47.7	48 80	0.8	45.9
% WITH CAPABILITY	24.2	61.3	50 . 0	50.8	32.8	12.3	25.5	2.7	. 0	10.1	12.1	18.7
MINNESOTA ESTIMATED POPULATION	2223	2354	2419	2050	1376	on on on	8	ā	22	000	,,,	¥69,
% STANDARD ERROR	13.9	13.6	13.6	14.5	7 7 5	6	24.6	·	;	9 00	770	1701
% WITH CAPABILITY	0 00 0 00 0 00 0 00	4	20.0) a	. 5			, (• •	33.2	5 L	4.01
) ;)	- : }	•)) 1	>		?	ţ	0 D	ם ח	0.07

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT
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STATE		VOR P	NAVIGATION	N EQUIPMENT	ENT		LONG R	LONG RANGE NAV	EQUIP	OTHER N	OTHER NAVIGATION	N EQUIP
	YOR TOOCH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NO NAV EQ
MISSISSIPPI FSTIMATED POPULATION	426	1275	1029	5 8 6	747	231	nu Ku	17	8	225	279	5 36
% STANDARD ERROR	32.8	18.	20.7	21.1	23.3	38.8	29.3	*	*	38.0	35.8	27.3
% WITH CAPABILITY	18.5	55.2	44.6	42.9	32.4	10.0	23.2	0.7	-	9.7	12.1	23.2
MISSOURI	4	2670	24.0	9700	1,10	9	Ğ		:	a d	ŭ C	.00
# STANDADD FEBRUE	1 2 2 3 4	12.7	1043	2. 5. 5. 6. 6. 6.		0 00	- e	30.5	- *	26.8	26.0	9 8
% WITH CAPABILITY	31.8	51.4	50.8	4.4	32.8	15.6	15.4	4.	0.5	7.6	10.3	23.4
MONTANA		!		;	!			,	,	i		;
ESTIMATED POPULATION	804	845	923	468	615	252	442	74	0	70	133	100
% STANDARD ERROR	24.0	23.3	22.5	22.7	27.6	4 30	32.0	* c	00	* "	* u	25.0 30.0
% WITH CAPABILITY	G. T.	33.0	- 05	30.0	0.47	D.	S./-	- -	5	7.7	9.6	38.6
NEBRASKA ESTIMATED POPULATION	648	903	1006	1014	745	232	326	34	φ	132	231	828
% STANDARD ERROR	26.7	21.8	21.0	21.0	24.1	39.8	38.4	*	*	*	39.2	22.8
% WITH CAPABILITY	25.5	35.5	39.5	39.8	29.3	9.1	12.8	1.3	0.5	5.2	9.1	32.6
NEVADA ESTIMATED POPULATION	508	1310	1170	1055	817	238	305	88	80	203	174	550
% STANDARD ERROR	28.4	18.3	18.5	19.6	22.1	39.3	35.8	*	*	36.8	35.9	26.5
% WITH CAPABILITY	22.4	57.8	51.6	46.5	36.0	10.5	13.5	ත ල	4.0	σο σο	7.7	24.3
NEW HAMPSHIRE ESTIMATED POPULATION	419	901	869	852	475	202	596	32	36	72	122	159
% STANDARD ERROR	33.0	22.1	23.0	23.1	30.3	44.5	28.0	*	*	*	*	38.7
% WITH CAPABILITY	27.6	59.3	57.2	56.1	31.2	13.3	39.2	2.1	2.3	4.7	8.0	10.5
NEW JERSEY					,	6	,	į	i	•	į	Ġ
ESTIMATED POPULATION	1164	2698	2378	5058	1847	833	1269	213	4	4	20	800
% STANDARD ERROR	19.2	12.5	12.0	12.6	14.7	20.3	18.1	27.6	*	21.9	19 9	24.8
% WITH CAPABILITY	26.4	61.2	66.4	59.6	4 0. T	18 9.	28.8	4 20	1.7	7.7	5.0	15.2
NEW MEXICO												
ESTIMATED POPULATION	738	1177	1382	1350	1029	472	81	19	0	224	227	680
% STANDARD ERROR	24.9	19.4	17.9	18.2	20.5	29.9	*	*	0.0	40.1	37.8	24.0
% WITH CAPABILITY	29.0	46.3	54.4	53.1	40.5	18.6	3.5	8 .0	0.0	60	o .	26.7

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 16

GENERAL AVIATION AVIONICS EQUIPMENT
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STATE		VOR	NAVIGATION	N EQUIPMENT			LONG RANGE	INGE NAV	EQUIP	OTHER N	OTHER NAVIGATION	N EQUIP
	YOR TOOCH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NO NAV EQ
NEW YORK		4 4 8 0	1000	0000	100	0	1001	32	a a	R73	822	15.28
K CTANDADA EDDAD	2 4		1000	305. 4 Ct	13.4		- C	26.00	7 50	21.5	1001	15.00 20.00 20.00
% WITH CAPABILITY	28.2	55.9	5.0	8.6	29.7	13.3 E. S.	25.9	9.6	2.5	90	11.2	20.6
NORTH CAROLINA	•	484	2409	3100	2157	91	1504	107	22	ď	943	685
R STANDADD FEBRUE			1 1 0		13.6	200	8 9	8 8	4 1 *	21.0	8 8	23.3
% WITH CAPABILITY	29.1	58.9	63.1	59.2	39.9	20.7	27.8	5.0	4.0	11.1	17.5	12.7
NORTH DAKOTA	739	473	60	r G	407	401	6	ď	m	40	r.	564
% STANDARD FREDR	25.4	300	28 0	27.9	33.7	*	*	*	*	*	*	28.9
% WITH CAPABILITY	42.4	27.1	35.0	34.1	23.4	9. G	υ	0.2	0.1	10	3.2	32.3
OHIO			Ċ	,	970	900	9	u C	Ğ	9	,	0
ESTIMATED PUPULATION	727	5 G	1526	- C	3478	277	5 4	077	•		# C	B C
% STANDARD ERRUR % WITH CAPABILITY	13.9 25.4	57.	9 gg	. 40 	38.4	13.7	20.2	2 2 2 3 3 3 3	* O	ກ ຫ ກ ຫ	13.4	20.2
	i i		i :						ı			
DKLAHDMA ESTIMATED POPULATION	1464	2511	2519	2170	1603	435	734	36	89 99	286	177	1000
% STANDARD ERROR	18.0	13.2	13.1	14.0	16.0	29.9	23.9	*	*	32.0	32.4	20.1
% WITH CAPABILITY	31.0	53.1	53.3	45.9	33.8	9.2	15.5	8.0	4 .	0.0	3.7	21.2
OREGON	,	4.0	0	9000	ŗ	8	o c	ŭ	Ţ	4	C	7
S STANDAD RODOD	7 1 10		2 390	4330 43 E	- u	400	17.A) •	- *	,	20.55	2 d
% WITH CAPABILITY	29.3	51.9	50.2	4. 7. 7. 8.	33.5	13.0	30.0	1.1	0.5	60	e F	6. 6. 7.
PENNSYLVANIA ESTIMATED POPULATION	2098	4017	3714	3328	2445	1095	1650	131	38	707	995	1521
% STANDARD ERROR	14.		10.5	11.1	12.5	18.1	15.6	32.5	48.5	19.5	17.6	15.1
% WITH CAPABILITY	28.7	55.0	50.8	45.6	33.5	15.0	22.6	-	0.5	9.7	13.6	20.8
RHODE ISLAND ESTIMATED POPULATION	138	247	297	283	160	57	107	-	0	42	20 44	6 8
% STANDARD ERROR	*		40.3	41.2	*	*	*	*	0	*	! #	*
% WITH CAPABILITY	33.0	59.4	71.3	67.9	38.5	13.8	25.7	o .3	0.0	10	12.9	(S)

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE		VOR N	NAVIGATION	N EQUIPMENT	Z		LONG RANGE NAV	NGE NAV	11071	CITER	OTHER NAVIGATION EQUIP	LICE I
	V0R 100CH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NAV EQ
SOUTH CAROLINA	ŭ Ľ	1241	1226	1314	847	288	572	a a	163	123	787	343
% STANDARD FREDR	28.1	6 6	1.61	18.6	22.5	32.6	27.7	*	*	49.7	35.7	33.7
% WITH CAPABILITY	25.5	56.8	56.1	60.1	38.8	13.2	26.2	4 .0	7.4	8	13.2	15.7
SOUTH DAKOTA												
ESTIMATED POPULATION	435	466	542	457	172	9	57	œ	0	24	61	909
% STANDARD ERROR	31.8	31.7	29.2	31.5	*	*	*	*	0.0	*	*	27.0
% WITH CAPABILITY	30.7	32.9	38.2	32.3	12.1	4.2	4.0	0.5	0.0	1.7	4 .	42.8
TENNO STATE												
ESTIMATED POPULATION	959	2379	2447	2405	1570	533	1451	9	15	416	488	56.3
% STANDARD ERROR	21.7	13.6	13.4	13.4	16.3	24.3	17.9	*	*	26.2	26.6	27.1
% WITH CAPABILITY	26.4	65.6	67.5	66.3	43.3	14.7	40.0	.	4 .	11.5	13.5	15.7
TEXAS												
ESTIMATED POPULATION	5927	11899	11777	11377	8460	3328	3769	518	173	2267	2243	4439
% STANDARD ERROR	8	ru eo	S	ອ ທ	6.7	40.4	10.7	20.2	32.5	11.3	11.4	හ ග
% WITH CAPABILITY	27.2	54.5	54.0	52.1	38.8	15.3	17.3	4.2	8 .0	10.4	10.3	20.3
ПТАН												
ESTIMATED POPULATION	380	781	836	749	519	197	359	14	19	122	254	189
% STANDARD ERROR	35.7	22.5	21.7	23.0	26.3	42.6	34.8	*	#	*	32.5	49.0
% WITH CAPABILITY	28.1	57.8	61.9	55.4	38.4	14.6	26.6	0.6	4.	0.6	18.8	14.0
VERMONT												
ESTIMATED POPULATION	192	426	380	355	156	49	181	0	0	39	39	160
% STANDARD ERROR	47.3	31.8	34.5	34.8	*	*	45.0	o 0	o 0	*	*	46.6
% WITH CAPABILITY	26.0	57.8	51.6	48.1	21.2	<u>ဖ</u>	24.5	0	0.0	5.2	τυ 4.	21.7
VIRGINIA	Š				,	ç	ć	ć	í	,		Ġ
ESTIMATED PUPULATION	12/2	2010	2213	2056	4000	יי פ טיי	820 000 000 000 000	, c	70 04	בי היי	7 4 7 7	0.38 0.48
% STANDARD ERRUR	9.0	7 (* 1		- (+ (0 0		7.7		0 ·	6.C7	7 . 7	7.07
% WITH CAPABILITY	34.5	0.4°.	0.0	22.	æ · / æ	ا ا ا	23.0	9.7	4 .	2.11	4	S
WASHINGTON	;		,		!	1		į	;	•	•	•
ESTIMATED POPULATION	2329	3590	3142	2940	1848	533	1111	20	38	201	244	1965
% STANDARD ERROR	13.9		6	12.2	15.3	27.3	16.3 16.3	* 1	* '	35.7	32.9	14.3
% WITH CAPABILITY	30.6	47.2	4 ω.	38.7	24.3	7.0	. 4 . 6	0.7	O . 0	2.6	3.2	25.8

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE		œ	NAVIGATION	ON EQUIPMENT	ENT		LONG RA	LONG RANGE NAV	EQUIP	OTHER N	OTHER NAVIGATION EQUIP	EQUIP
	0 V 0 V V V V V V V V V V V V V V V V V	200CH	2+ VOR	ADF	DAE	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NAV EQ
WEST VIRGINIA ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	426 34.2	750 25.0 62.5	739 25.3 61.6	585 28.2 48.8	476 30.9 39.6	183 47.1 15.3	325 38.3 27.0	* 0 4 * 4	000	84 * 7.0	137 49.5 11.4	187 46.3 15.5
WISCONSIN ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1568 16.8 28.7	2549 12.9 46.7	2572 12.9 47.1	2257 13.6 41.3	1416 16.7 26.0	598 25.1 11.0	1003 20.0 18.4	& * °	æ * °.	356 29.66 5.5	585 24.5 10.7	1480 17.4 27.1
WYOMING ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	219 42.8 19.7	741 24.8 66.4	580 27.4 52.0	539 48.99	369 34.2 33.1	123 * 11.0	290 40.3 26.0	0 0 0 0	* 0 4 * 4	102 * 8 9 . 2	169 48.0 15.1	173 * 15.5
PUESTO RICO ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	152 * 33.4	251 40.4 55.3	257 40.6 56.5	256 41.2 56.3	154 * 33.9	46 * 10.1	* ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	æ * -	د * د ت	8 * 8 0.	47 * 10.3	20 * 1. 8 . 1.
OTHER U.S. TERRITORIES ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	36 * 20.8	114 * 65.3	123 * 70.4	163 47.3 93.1	56 * 99 . 3	32 * 18 · 5	31 * 17.9	w * L .	e * 1 .	25 * 14.1	L * 0.	e * c
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	73242 2.0 27.4	146429 1.0 54.8	141449 0.7 52.9	131912 0.9 49.4	89581 1.2 33.5	33142 2.6 12.4	57461 2.3 21.5	4309 5.8 1.6	2457 9.0 0.9	21177 2.8 7.9	25509 2.4 9.5	54359 1.6 20.3

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

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STATE				GUIDANCE	E AND CO	AND CONTROL EQUIPMENT	UIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	NO EQUIP
ALABAMA ESTIMATED POPULATION	427	868	80	35	177	234	670	36	1627
% STANDARD ERROR	28.8	23.8	*	*	*	44.5	23.5	*	16.5
% WITH CAPABILITY	15.2	23.8	2.9	1.2	6 .3	æ .⊛	23.8	۔ ن	57.9
ALASKA									
ESTIMATED POPULATION	162	613	ო	œ	80	107	123	63	7847
% STANDARD ERROR	46.3	24.8	*	*	*	*	*	*	9 .
% WITH CAPABILITY	1.9	7.0	0.0	0.	6.0	1.2	4.	0.7	90.2
ARIZONA									
ESTIMATED POPULATION	427	979	82	83	239	770	666	8	3996
% STANDARD ERROR	28.6	20.6	*	*	43.1	25.0	20.1	*	10.2
% WITH CAPABILITY	6.8	15.6	1.3	1.3	ж Э.	12.3	15.8	0.0	63.6
ARKANSAS									
ESTIMATED POPULATION	387	675	06	<u>\$</u>	83	297	299	0	1663
% STANDARD ERROR	28.8	24.1	48.8	41.7	*	38.9	23.5	0.0	16.4
% WITH CAPABILITY	13.7	23.9	3.2	3.5	2.9	10.5	21.2	0.0	58.8
CALIFORNIA									
ESTIMATED POPULATION	3657	6275	460	421	2778	4202	5123	389	22425
% STANDARD ERROR	9.6	7.5	24.5	25.4	12.5	10.1	8.1	31.8	4.2
% WITH CAPABILITY	10.1	17.3	1 .3	1.2	7.7	11.6	14.1	-	61.9
COLORADO									
ESTIMATED POPULATION	400	587	18	44	269	302	937	ო	3502
% STANDARD ERROR	28.0	23.2	*	*	41.6	38.6	20.1	*	11.2
% WITH CAPABILITY	7.8	1.5	0 4 .	6 .	5.5	6.2	18.3	0.1	68.3
CONNECTICUT				!			!		:
	258	431	78	17	96	270	495	œ	1263
% STANDARD ERROR	36.2	29.1	*	*	*	40.2	28.4	*	18.9
% WITH CAPABILITY	11.7	9.6	ر ۳.	89 .	4	12.3	22.5	4 .	57.5
DELAWARE	,		,	•	1	,		•	
	081	5/4	97	U	ò	24.5	333)	/ 84
% STANDARD ERROR	34.4	36.1	*	48.8	*	*	32.3	0.0	32.8
% WITH CAPABILITY	18.0	25.9	4.	4.2	ල ල	13.5	36.7	0.0	42.2

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	1			GUIDANC	GUIDANCE AND CONTROL EQUIPMENT	NTROL EG	NIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	NO
D.C.									
ESTIMATED POPULATION	23	34	20	20	0	4	26	0	17
N STANDARD ERROR	*	48.1	0.0	0.0	0.0	*	*	0.0	*
% WITH CAPABILITY	35.0	50.1	29.9	29.9	0.0	21.2	38.6	0.0	25.1
FLORIDA									
ESTIMATED POPULATION	2313	3921	297	127	674	1912	2887	·	7700
% STANDARD ERROR	11.8	6. 9.3	34.1	44.7	25.8	15.4	(n)	*	667
% WITH CAPABILITY	15.4	26.1	2.0	0.8	4.5	12.7	25.9	0.0	52.0
GEORGIA									
ESTIMATED POPULATION	624	866	113	67	127	709	1056	401	3442
% STANDARD ERROR	22.0	21.1	*	*	*	25.3	18.7	*	11 2
% WITH CAPABILITY	11.0	15.2	2.0	1.2	2.2	12.5	18.6	60.5
HAWAII ECTIMATED BOBIN ATTON	č	i	ı	•	i				
TOT TOLON TOLON	0	4	n	0	0	14	71	0	584
% STANDARD ERRUR	*	*	*	0.0	0.0	*	*	0.0	27.0
% WITH CAPABILITY	0.0 6.0	4.0	0.7	0.0	0.0	2.0	0.01	0.0	82.4
IDAHO									
ESTIMATED POPULATION	193	327	22	41	119	222	228	20	1787
% STANDARD ERROR	42.3	35.9	*	*	*	46.3	40.8	*	15.7
% WITH CAPABILITY	7.6	12.9	8.0	-	4.7	8.7	6 7 6 8	0.7	70.2
ILLINDIS									
ESTIMATED POPULATION	1169	1812	75	227	877	958	1923	14	4839
A STANDARD ERROR	16.9	14.3	39.6	34.2	23.2	22.5	13.8	*	4.6
& WILH CAPABILITY	3.3	20.6	6. O	2.6	0.0	10.9	21.8	0.7	54.9
INDIANA									
	531	1220	27	70	197	718	995	Ç	2598
% STANDARD ERROR	23.2	17.2	41.5	*	*	26.4	18.6	· *	13.0
% WITH CAPABILITY	11.2	25.7	9.0		4.4	15.1	20.9	0.2	54.7
IOWA									
	375	746	18	31	172	482	711	18	1856
% STANDARD ERROR	31. 9	24.1	*	*	*	31.3	24.1	*	15.0
% WITH CAPABILITY		22.4	9.0	6. 0	5.2	14.5	21.4	9.0	55.8
									I I J

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE			1	GUIDANCE		AND CONTROL EQUIPMENT	UIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	EQUIP
KANSAS ESTIMATED POPULATION	489	9 8 8	89	8. 4.	112	528	863	ā	2914
% STANDARD ERROR	26.1	20.6	*	*	*	29.9	20.4	*	12.3
% WITH CAPABILITY	10.6	19.8	1.5	0.7	2.4	11.4	18.6	0.3	62.9
KENTUCKY ESTIMATED POPULATION	230	344	46	36	9	258	401	•	40
% STANDARD ERROR	37.2	33.2	*	*	*	42.9	30.8	° *	- C
% WITH CAPABILITY	12.2	18.3	4.2	1.9	1 .6	13.7	21.3	0.1	61.8
LOUISIANA									
ın.	353	669	ო	12	128	433	537	109	2287
% STANDARD ERROR	28.0	21.9	* (* (* (33.2	25.5	*	14.2
* WITH CAPABILITY	n n	7.82	0	e.0	₩. 4.	17.6	14.4	9.	61.3
w co	72	219	-	0	21	137	139	ო	1168
% STANDARD ERROR	*	46.2	*	0.0	*	*	*	*	19.3
% WITH CAPABILITY	4.7	14.2	0.1	0.0	4.4	8.9	0.6	0.2	75.8
MARYLAND ESTIMATED POPULATION	385	597	76	5	215	441	397	-	0880
% STANDARD ERROR	32.0	26.4	*	*	43.6	32.7	30.3	*	15.3
% WITH CAPABILITY	11.9	18.5	2.4	0.5	6.7	13.6	12.3	0.0	57.6
MASSACHUSETTS ESTIMATED POPULATION	416	946	47	9	181	75.1	637	ō.	4000
% STANDARD ERROR	29.9	21.4	#	*	48.5	25.3	24.6) *	14.2
% WITH CAPABILITY	10.6	24.0	1.2	0.5	4,0	19.1	16.2	1.0	53.2
MICHIGAN ESTIMATED POPULATION	977	1489	237	112	528	852	1472	6	5337
% STANDARD ERROR	18.4	15.9	34.8	43.6	31.3	23.0	15.7) *	6
% WITH CAPABILITY	11.5	17.5	2.8	1 .3	6.2	0.0	17.3		62.8
MINNESOTA FSTIMATED BODEN ATTON	4	7.50	,	8	Ċ	Ş	Č	;	Š
% STANDARD FREDR	2 6	. c	- ,	70 +	9 0	3 6	- 6	- t	408.1
	, r		• •	, u	o c	34.5	7.0	* (- 6
	,	1	•) >	7.0		0 · 7 ·	· ·	5

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STATE				GUIDANCE	E AND CO	AND CONTROL EQUIPMENT	UIPMENT	1	1 1 2
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO LAND	NO EQUIP
MISSISSIPPI ESTIMATED DODIE ATTON	325	524	45	0	69	256	363	36	1545
% STANDARD ERROR	35.9	28.3	*	0.0	*	43.5	31.0	*	17.3
% WITH CAPABILITY	14.1	22.7	÷.	0.0	3.0	11.1	15.7	<u>.</u>	6. 99
MISSOURI									
ESTIMATED POPULATION	449	1064	47	76	252	567	995	ო	3150
% STANDARD ERROR	25.2	19.2	*	*	40.7	29.1	19.5	* (1.8
% WITH CAPABILITY	8 9	20.4	о	<u> </u>	4 . ∞	6. O	 9	0	60 4
MONTANA									
ESTIMATED POPULATION	76	418	33	9	126	266	196	0	1876
% STANDARD ERROR	*	33.1	*	*	*	42.8	46.7	o 0	15.8
% WITH CAPABILITY	3.0	16.4	- 3	0.2	4 .9	4.01	7.7	0.0	73.4
0 0 0 2 2 2									
ESTIMATED POPULATION	283	341	7	=	181	214	326	27	1752
% STANDARD ERROR	36.8	33.6	*	#	*	48.6	33.1	#	16.0
% WITH CAPABILITY	11.1	13.4	O	0 .	7.1	₩	12.8		89 89
NEV ADA									
ESTIMATED POPULATION	296	389	57	41	205	191	326	0	1439
% STANDARD ERROR	33.8	30.2	*	*	47.3	49.1	29.7	0.0	17.2
% WITH CAPABILITY	13.1	17.1	2.5	9 .0	.	₹ .	4.4	0.0	63.5
NEW HAMPSHIRE					,	,	;	(
	86	155	ω	9	61	283	102	Ν,	1030
	*	43.9	*	*	*	4 0.6	*	*	20.6
% WITH CAPABILITY	5.7	10.2	O	9. 7.	4 0	18.7	6.7	- 0	67 · 8
NEW JERSEY	d C	0	9	ā		ď	1044	4	2332
ESTIMATED POPULATION	900	7 20	44	. AA	- c	9000	4 %	*	13.7
A WITH CAPABILITY	4.0	26.8	-	-	4.	1.5	23.7	0.	52.8
	•		•						
NEW MEXICO	•		;	;	,	•	6	•	•
ESTIMATED POPULATION	406	587	200	06	129	99.0	20 G	9	138
% STANDARD ERROR	31.8	26.0	*	* '	* (9 9 9	8.87) (D 1
% WITH CAPABILITY	16 .0	23.1	2.3	w n	5.	7.00	73.7	o •	04.

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	1			GUIDANCE	E AND CONTROL		EQUIPMENT	1	
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO LAND	EQUIP
NEW YORK ESTIMATED POPULATION	1054	1670	131	135	478	4	1542	80	4201
% STANDARD ERROR	17.5	15.3	42.1	31.9	30.3	30.3	, ru	*	0
% WITH CAPABILITY	14.1	22.4	1.8		4.0	6.5	20.7	e.0	56.3
NORTH CAROLINA	000	1500	900	, 10	967	1.40	6	ť	i c
% STANDARD FREDR	2 0 1 0 4 0 1	15.9	, c	42 8	42 B	, to		₽,	707
WITH CAPA	17.0	28.2	7.3	4.6	9	9. E	25.7	1.4	. 8 . 0
NORTH DAKOTA	ğ	ç	Ć	•	C C	r	ţ	•	,
K STANDADD FEBOR	2 *	7 7 7 8	S C	* ,	n D *	` ,	С <u>о</u>	0	1422
% WITH CAPABILITY	6.7	12.2	000	0.2	3.7	0.	. 66 . 53	0	81.6
OHIO FETTIMATED POPUL ATTON		2153	800	130	838	2.00 R	808+	ç	4662
. 2	17.2	13.7	40.0	41.9	2000	2 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	4	2 *	0 0
ď	13.3	24.1	6,3	- 6	7.1	4.4	20.5	7.5	52.2
OKLAHOMA FETTMATED BOBILL ATTOM	C.	90	r	ŭ	. 100	Q C	i I	¢	,
_	28.4	23.7	*) n *	0 K	74 A	2,70	" *	17.7 12.8
Š	7.7	14.7	0.2	1.1	6	16.6	16.3	0.1	57.3
OREGON ESTIMATED POPULATION	573	6.5	ά	20	225	200	7 7	c	3317
	25.8	22.5	• *) i *	42.8	28.9	22.0	0	11.4
	11.2		1.6	9 .	4.4	1.5	15.6	0.0	65.0
			;	;	•	1		1	
ESTIMATED POPULATION	965	1493	40	4	344	832	- 8	68	4561
% STANDARD ERROR	17.7	15.3 E	*	*	36.4	23.5	. 8	*	9 6
% WITH CAPABILITY	13.2	20.4	9.0	9.0	4.7	4 .	15. 1	6 9.	62.4
RHODE ISLAND	č	ć	•	((;	,	•
٠,	\$,	ה ה	ν,	٥ ,	2	` .	ה מ	0 (233
AND	* (* (*	* ,	* ,	*	*	0	44.2
% WITH CAPABILITY	80	23.9	o		4.8	~	22.8	0.0	55.8

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE			1	GUIDANCE		AND CONTROL EQUIPMENT	UIPMENT	1	4 1
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO LAND	NO EQUIP
SOUTH CAROLINA ESTIMATED POPULATION	344	452	112	7 0	120	401	447	0	1134
% STANDARD ERROR	33.4	29.9	*	*	*	34.8	29.5	0.0	19.8
% WITH CAPABILITY	15.8	20.7	ю 1.	2.5	S) S)	18.4	20.5	0.0	51.9 9.
SOUTH DAKOTA		1	1	,	1	;	,	,	
ESTIMATED POPULATION	35	92	ហ	ო	84	<u>\$</u>	 	8	1140
	*	*	*	*	* ;	* 1	* 1	* (- 20.00 - 00.00
% WITH CAPABILITY	2	(O	0	0.7	Q.	7.0	5.7 7.2	0.	9 .08
TENNESSEE									
ESTIMATED POPULATION	475	1024	42	67	228	465	792	50	1775
% STANDARD ERROR	26.1	19.9	*	*	47.8	31.8	21.6	*	
% WITH CAPABILITY	13.1	28.2	1.1	6.	ල	12.8	21.8	.	48.9
TEXAS									
ESTIMATED POPULATION	3427	5239	266	222	1586	1931	4772	83	12251
	ග ග	8.7	35.6	29.0	17.3	15.4	8 . 4	*	5. 8.
% WITH CAPABILITY	15.7	24.0	1.2	- 0.	7.3	69 69	21.9	0 4	56.1
LTAH									
ESTIMATED POPULATION	290	450	5	ស	96	66	290	7	685
% STANDARD ERROR	35.5	28.8	*	*	*	*	36.3	*	25.9
% WITH CAPABILITY	21.5	33.3	8 .0	4.0	7.1	7.3	21.5	0.1	50.7
VERMONT									
ESTIMATED POPULATION	84	66	8	0	80	87	81	ო	479
% STANDARD ERROR	*	*	*	o 0	*	*	*	*	28.4
% WITH CAPABILITY	11.4	13.5	0.3	0.0	10.8	1.8	10.9	4.0	65.0
VIRGINIA ESTIMATED DODULATION	808	717	43	28	297	468	806	88	1813
% STANDARD FREDR	23.3	21.6	8.8	*	37.4	32.0	9.61	*	15.5
	17.0	19.4	1.2	8.0	8	12.7	24.6	8 9.	49.1
MASHINGION ESTIMATED POPULATION	353	916	39	68	374	662	524	8	5623
% STANDARD ERROR	31.7	21.3	*	*	34.2	25.9	27.5	#	8.7
% WITH CAPABILITY	4.6	12.0		1.2	4 .9	8.7	6.9	9 .0	73.9

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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STATE	1			GUIDANCE		AND CONTROL EQUIPMENT	UIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	EQUIP
WEST VIRGINIA ESTIMATED POPULATION	117	212	60	ம	Ø	246	173	8	745
% STANDARD ERROR	*	43.1	*	*	*	45.1	45.8	*	25.0
% WITH CAPABILITY	9.7	17.6	0.0	o	0	20.5	14.4	0.2	62.1
WISCONSIN									
ESTIMATED POPULATION	552	1107	8	54	197	681	621	30	3559
% STANDARD ERROR	25.0	19.4	*	*	47.8	26.4	22.9	*	11.1
% WITH CAPABILITY	10 .	20.3	0.0	7.0	9	12.5	11.4	0.6	65.2
WYOMING									
ESTIMATED POPULATION	182	234	16	26	89	46	228	7	756
% STANDARD ERROR	46.5	40.1	*	*	*	*	41.1	*	25.0
% WITH CAPABILITY	16.3	21.0	<u>.</u>	2.3	6.1	4.	20.4	9.0	67.8
PUERTO RICO	Ċ	Ċ	d	•	ţ	;	•	•	;
MOTING LONG AND	B .	n O	0	-	2	32	82	0	299
A STANDARD ERRUR	*	*	*	*	#	#	*	o 0	35.6
% WITH CAPABILITY	7.8	ຄ.	1.7	ტ	3.7	න ග	18.1	0.0	62.9
OTHER U.S. TERRITORIES									
	22	3 9	က	ო	12	12	9	ო	16
% STANDARD ERROR	*	*	*	*	*	*	*	*	*
% WITH CAPABILITY	12.4	20.7		1.6	7.1	7.1	28.1	– •	52.1
TOTAL									
ESTIMATED POPULATION	29798	51569	3749	3244	14679	28408	45753	1688	163960
S STATES OF THE STATES	4.4	9.0) 30 ·	7 0 ·	5.2	. A.	1.7	15.2	0.7
& WILL CAPABILITY	11.2	19.3	4.	7.5	ro ro	. 6	17.1	9.0	61.4

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

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REGION	¥	VHF COMMUNI	CATIONS		TRANSPONDER	ONDER EQU	EQUIPMENT	9	PRECISION A	APPROACH	EQUIPMENT	<u> </u>
	588	42 42	2+ SYS	8 ¥	4096 CODE	ALTIT	NO TRANS	LOCAL	MRKR	GL IDE SLOPE	MLS	NO ILS
ALASKAN ESTIMATED POPULATION	4725	3658	2150	580	3049	089	5653	2369	1989	1502	4	6152
% STANDARD ERROR	8.7	10.1	13.2	25.9	11.0	22.4	9.7	11.9	13.3	14.9	*	7.6
% WITH CAPABILITY	54.3	42.0	24.7	6.7	35.0	7.9	65.0	27.2	22.9	17.3	0.5	70.7
CENTRAL FOTTMATED BODDIL ATTON	F294	7499	7480	3570	9269	20 20 20 20 20	6449	7624	7080	654	118	\$ 777 4
% STANDARD FREDR	() ()	2.5	7.5	10.7	6.7	8	8	7.4	7.7	8	*	7.3
% WITH CAPABILITY	33.7	47.7	47.6	22.7	29.0	35.5	41.0	48.5	45.0	41.6	8.0	49.5
EASTERN ESTIMATED POPULATION	10414	15840	15377	3998	19848	13523	8573	16507	14757	14228	273	11489
% STANDARD ERROR	6.4	S.	5.0	0	4	e e	0	9	r.	5.2	37.4	5.7
% WITH CAPABILITY	36.6	55.7	54.1	1.4	69.8	47.6	30.2	58.1	51.9	50.1	0.7	40.4
GREAT LAKES ESTIMATED POPULATION	16300	23382	22911	8093	28560	16397	16778	23044	21643	19775	309	21565
% STANDARD ERROR	ru T	4.4	4.1	8,8	හ ග	₩.	4.7	4.4	4.2	4.4	32.8	4.2
% WITH CAPABILITY	36.0	51.6	50.5	17.9	63.0	36.2	37.0	50.8	47.7	43.6	0.7	47.6
NEW ENGLAND ESTIMATED POPULATION	3655	6085	5548	1056	7 162	4854	3182	5883	5477	5223	42	4362
% STANDARD ERROR	10.9	8.4	89	19.2	7.8	4.6	11.1	9.8	ол 80	1.	*	9. 6
% WITH CAPABILITY	35.3	58.8	53.6	10.2	69.2	46.9	30.8	56.9 9	52.9	50 .50	4.0	42.2
NORTHWEST MOUNTAIN ESTIMATED POPULATION	9498	13222	11528	4250	15732	9053	7874	11975	10887	10271	99	12685
% STANDARD ERROR	4.	4	4	0	9	න ල	4	4.0	6	9	28.2	ر س
% WITH CAPABILITY	34.8	54.0	50.1	15.8	65.2	39.5	34.8	51.1	46.6	44.1	8. O	46.6
SOUTHERN SOUTHERN SOUTH ATTON	11744	25928	22488	4140	29838	18364	4696	24702	23024	22209	25.7	14344
% STANDARD ERROR	. C	3.7	0.4	8	3.6	4.1	, co	(e)	0.4	4	35.7	4.3
% WITH CAPABILITY	32.2	62.1	52.3	10.2	72.5	8.8	27.5	56.5	50.9	48.2	0	42.3

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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REGION	YHY	VHF COMMUNICATIONS	ICAT I ONS		TRANSP	TRANSPONDER EQUIPMENT	IPMENT	A B	PRECISION	APPROACH	EQUIPMENT	5
	360 CH	720 CH	2+ SYS	5 7 7 1	4096 CODE	ALTIT	NO	LOCAL	MRKR	GL IDE SLOPE	MES	NO 1LS
SOUTHWESTERN FOTTMATED POPUL ATTON	11745	19443	19087	5439	24052	15054	11584	18243	17580	16657	448	15772
% STANDARD FRADR	6	4 7	4.2	8	re.	4.7	60	9	n U	5.5	34.2	5.2
% WITH CAPABILITY	29.3	57.2	16.1	12.6	70.9	38.7	29.0	60.2	51.2	50.5	0.5	40.1
WESTERN-PACIFIC FSTIMATED POPULATION	14996	27776	23484	4617	32409	21832	12397	25448	22947	21679	273	18820
% STANDARD ERROR	9	8	4	6	m m	4	6.3	ග	4.0	₹.	39.0	€.4
% WITH CAPABILITY	29.7	65.6	57.8	10.5	75.5	46.5	24.5	62.5	58 .3	56.2	9.0	36.3
TOTAL												
ESTIMATED POPULATION	92767	148699	135630	38959	177655	109360	89576	142322	130394	122793	2010	120423
% STANDARD ERROR	1.7	1.0	6.0	2.2	9.0	1.2	7.5	8.0	6. O	-	13.8	0.
% WITH CAPABILITY	34.7	55.6	50.8	14.6	66.5	40.9	33.5	53.3	48.8	46.0	8.0	45. 1

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

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REGION		VOR	NAVIGATION	N EQUIPMENT	ENT		LONG RA	RANGE NAV	EQUIP	OTHER N	NAVIGATION	N EQUIP
	J	. ~	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NO NAV EQ
ALASKAN ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	4112 9.6 47.3	2638 11.3 30.3	2093 13.5 24.0	4126 9.3 47.4	982 19.2 11.3	222 40.3 2.6	1667 14.3 19.2	60 * 0.7	105 * . 2 · 5	209 37.1 2.4	60 6 * -	1409 17.2 16.2
CENTRAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	4245 10.1 27.0	7776 7.4 49.5	7604 7.4 48.4	7324 7.6 46.6	5102 8 .9 32 .5	2209 13.2 14.1	2748 12.7 17.5	324 23.8 2.1	122 42.1 0.8	1154 16.5 7.3	1590 14.4 10.1	4025 9.9 25.6
EASTERN ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	8300 7.2 29.2	16313 4.9 57.4	16296 4.9 57.3	14727 5.1 51.8	9983 6.1 35.1	4335 9.1 15.3	7035 7.7 24.8	734 13.7 2.6	413 17.8	2704 9.8 9.5	3596 9.0 12.7	5214 8.2 18.3
GREAT LAKES ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	12374 5.8 27.3	24523 4.0 54.1	24344 3.9 53.7	21544 4.2 47.5	14816 5.0 32.7	5328 8.0 11.8	9466 6.6 20.9	794 7.51 1.8	378 25.2 0.8	3945 8 .6 7 . 8	4939 7.9 10.9	10021 6.0 22.1
NEW ENGLAND ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	2934 12.3 28.4	6046 8.4 58.5	6021 8.6 58.2	588 8 . 8 . 8 . 8 .	3329 11.2 32.2	1155 18.3 11.2	3322 11.4 32.1	45.3 1.2	8 * O 4 * 0	677 22.0 6.5	738 21.6 7.1	1539 15.0 14.9
NORTHWEST MOUNTAIN ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	7599 5.0 27.7	12609 3.4 52.2	12011 3.4 50.9	10968 3 . 55	7329 4.1 33.7	2638 6.8 12.3	4998 5.9	243 14.4 1.5	132 22.0 0.7	1291 7.5 7.6	1575 7.2 8.2	6067 5.0 22.4
SOUTHERN ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	9587 5.8 26.0	24477 3.8 59.9	23806 3.9 54.7	22678 4.2 46.6	15900 4.8 34.3	5954 8 . 5 11. 0	11799 7.5 16.8	747 19.6 1.0	4.01 4.00	444 10.8 9.00	6040 10.5 14.8	6397 6.3 18.0

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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REGION		VOR	NAVIGATION	ON EQUIPMENT	WENT		LONG RJ	ANGE NAV	EQUIP	OTHER !	DTHER NAVIGATION EQUIP	N EQUIP
	VOR 100CH	VOR 200CH	2+ V0R	ADF	DME	RNAV	LORAN	LORAN OMEGA	OTHR	RADAR I	WEATHER	NAV EQ
SOUTHWESTERN ESTIMATED POPULATION	9311	19276	19068	18547	13234	4892	7578	648	301	3365		7585
% STANDARD ERROR	1.1		7U 0	TU L	4.0	დ. წ	8.5	16.1	30.1	0.6	α (α μ	7.5
& WIIN CAPABILLIY	27.3		× .	- /n	7.78	D.	13.1	- -	~ -	12.9		1.7.
WESTERN-PACIFIC ESTIMATED POPULATION	11684	11684 26789	24652	20888	15423	4934	7518	468	403	2663	2433	8070
% STANDARD ERROR	6.7	0.4	3.9	4.0	4.7	7.5	10 00	16.6	28.1	8.0	6.9	7.5
% WITH CAPABILITY	24.3	62.0	60.3	57.3	40.2	15.1	29.8	4.9	0.0	11.2	15.3	16.2
TOTAL	73949	72242 146420	141440	121012	а д д	33143	57481	4300	7.46.0		0	25.00
% STANDARD ERROR	20.0	0.7	7.0	9.0 0.0	1.2	2.6	2.3		0.6	7.87	2.4	. A
% WITH CAPABILITY	27.4	54.8	52.9	49.4	33.5	12.4	21.5	1 .6	6 .0	7.9	15. O	20.3

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

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REGION				GUIDANCE		AND CONTROL EQUIPMENT	UIPMENT	1	1
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	ROUIP
ALASKAN ESTIMATED POPULATION	162	613	ო	œ	80	107	123	63	7847
% STANDARD ERROR	46.3	24.8	*	*	*	*	*	*	9.9
% WITH CAPABILITY	.	7.0	0.0	0.1	6.0	1.2	4.4	0.7	90.2
CENTRAL									
"	1596	3069	148	152	717	1791	2896	61	9672
% STANDARD ERROR	14.4	11.3	4 0.0	44.1	24.9	16.2	11.2	*	9 .9
% WITH CAPABILITY	10.2	19 3.	6.0	0.0	4 .6	11.4	18 . 4 .	0 4	61.5
EASTERN									
ESTIMATED POPULATION	3983	6177	\$	370	1618	3143	5578	129	15974
% STANDARD ERROR	9 .	7.5	22.3	18.6	16.4	11.9	7.8	*	0
% WITH CAPABILITY	14.0	21.7	4.	1 .3	5.7	11.1	19.6	(O	56.2
GREAT LAKES									
ESTIMATED POPULATION	4880	8788	625	641	2848	5007	7795	318	27638
% STANDARD ERROR	0. 80	4.0	21.1	19.8	12.8	4 .	10	35.2	3.7
% WITH CAPABILITY	10.8	19.4	4.	4.	છ	11.0	17.2	0.7	61.0
NEW ENGLAND									
ESTIMATED POPULATION	940	1950	88	91	459	1535	1548	55	6266
% STANDARD ERROR	19.5	14.5	*	*	30.6	17.4	15.8 8.2	*	8.2
% WITH CAPABILITY	.	# 80 80	6	6 .0	4.4	4.8	15.0	0.5	9 09
NORTHWEST MOUNTAIN									
ESTIMATED POPULATION	2070	3745	219	231	1277	2183	3198	78	16546
% STANDARD ERROR	8. 5.	5.4	21.6	18.9	11.3	8.7	ស	35.3	3.1
	11.5	19.1	- -	1.2	5.7	ω .υ	17.2	4.0	62.0
SOUTHERN									
ESTIMATED POPULATION	57 15	9446	1145	575	1721	5027	9134	319	26496
% STANDARD ERROR	6 0	6.7	22.8	22.7	•	.	7.2	31.7	න ල
% WITH CAPABILITY	60	17.0	۔ س	- . -		11.4	14.3	69. O	62.5

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

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REGION	1			GUIDANC	E AND CO	GUIDANCE AND CONTROL EQUIPMENT	UIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	KOUIP
SOUTHWESTERN ESTIMATED POPULATION	4938	7896	424	474	2231	3646	7281	195	20303
% SIANDARD ERRUR % WITH CAPABILITY	8.6 12.9	6.4 21.3	40. - 0.3	30.1	4. 7 8. 7	12.2	21.1	4.0 4.0	4 .2 50.1
WESTERN-PACIFIC ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	4380 7.4 14.4	7643 6.0 23.9	599 18.6 9.9	51.8 23.9 51.5	3222 16.4 4.4	5163 9.4	6442 5.9	39. 34. 50 8. 50	27860 4.3 54.4
TOTAL ESTIMATED POPULATION	29798	51569	3749	3244	14679	28408	45753	1688 2. 888	163960
% STANDARD ERROR % WITH CAPABILITY	4.2.	19.0 19.3	e – O 4	80 L	(U) (U)	3.4 4.6	1.7	5.2 0.6	61.4

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED.

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GENERAL AVIATION AVIONICS EQUIPMENT
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PRIMARY USE
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PRIMARY USE	H	VHF COMMUN	MUNICATIONS		TRANSPONDER	ONDER EQU	EQUIPMENT	PRE	PRECISION A	APPROACH	EQUIPMENT	
	l !	720 CH	2+ SYS	5 ×	4096 CODE	ALTIT	NO TRANS	LOCAL	MRKR	GL IDE SLOPE	MLS	NO 1LS
EXECUTIVE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1171 16.2 9.8	10939 3.9 92.0	10486 4.1 88.2	£ * 0	11623 3.8 97.7	10763 3.9 90.5	272 36.0 2.3	11387 3.8 95.7	11153 3.8 93.8	11119 3.9 93.5	151 38.3 1.3	493 26.8 1.1
BUSINESS ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	10746 6.0 26.9	30452 3.2 76.1	32546 3.0 81.4	864 20.6 2.2	37512 2.7 93.8	28892 3.1 72.2	2480 11.9 6.2	34499 2.9 86.3	34002 2.9 85.0	32207 3.0 80.5	619 26.2 1.5	4664 8.9 11.7
PERSONAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	53059 2.3 42.9	67049 2.0 54.2	62069 2.0 50.1	11882 4. 6 9. 6	83682 1.6 67.6	44603 2.6 36.0	40085 2.2 32.4	63312 2.0 51.2	56086 2.2 45.3	52427 2.3 42.4	509 27.7 0.4	53160 1.8 47.0
INSTRUCTIONAL LSTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	5112 9.1 32.8	10158 6.4 65.2	6410 8.3 41.1	782 19.7 5.0	11910 5.8 76.4	5179 9.3 33.2	3671 10.4 23.6	8353 7 . 2 53 . 6	6486 8.2 41.6	6008 8.6 38.6	0 * 5 0.2	7111 7.3 45.6
AERIAL APPLICATION ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	765 21.3 11.8	787 19.6 12.2	341 29.2 5.3	4949 3.8 76.5	619 23.8 9.6	218 37.2 3.4	5849 3.1	221 33.6 3.4	35.8 3.0	205 34.5 3.2	* O 4 * L .	6242 3.4 96.5
AERIAL OBSERVATION ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	1351 17.2 27.6	3155 11.1 64.4	2235 13.4 45.6	556 22.5 11.4	3468 10.7 70.7	1941 14.2 39.6	15.0 15.0 29.3	2347 13.2 47.9	1870 14.9 38.1	1675 15.5 34.2	102 *	2420 11.9 49.4
OTHER WORK USE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	555 24.6 34.4	876 20.0 54.2	514 29.3 31.8	214 39.5 13.2	815 20.9 50.4	393 28.9 24.3	801 20.1 49.6	313 37.7 19.4	42.2 44.1	2 4 8 4 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	000	1296 15.6 80.2
COMMUTER ALR CARRIER ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	Ø * Ö Ø * Ö	997 15.8	695 19.3 68.1	o * 0	869 17.8 85.2	814 18.0 79.8	151 43.4 14.8	1009 15.6 98.9	935 17.0 91.6	911 17.4 89.3	27 * 2 . 7	1,1

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1987

PAGE 2 OF 6

PRIMARY USE	H	VHF COMMUN	MUNICATIONS	1	TRANSP	RANSPONDER EQL	EQUIPMENT	84	PRECISION	APPROACH	EQUIPMENT	=
	98 G-8	720 CH	2+ SYS	N H	4096 CODE	ALTIT	NO	LOCAL	MRKR	GLIDE	MLS	NO 1LS
AIR TAXI ESTIMATED POPULATION % STANDARD ERROR	1048	5216	4580 8.5	*	5382 7.8	4366 8.7	799	4782 8.3	4704 8.4	4594 8. 53	155 *	1333 15.2
% WITH CAPABILITY	17.0	84.4	74.1	æ. -	87.1	70.8	12.9	77.4	76.1	74.3	2.5	21.8
OTHER ESTIMATED POPULATION	1276	3861	2619	769	3757	2604	2023	2651	2446	2514	92	3076
% STANDARD ERROR % WITH CAPABILITY	15.7	6. 8.99	45.3 45.3	21.8	65.0	10.6 45.1	35.0	10.7 45.9	42.3	43.5	48.0	10.7 53.2
INACTIVE ESTIMATED POPULATION % STANDARD ERROR	17839	11746	11805	21584	15587	7610 6.4	34052	11598 4.0	10843	9359	08.00 08.00	37067
% WITH CAPABILITY	35.9	23.7	23.8	43.5	31.4	15.3	9.89	23.4	21.8	18.9	0.7	74.7
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	92767 1.7 34.7	148699 1.0 55.6	135630 0_9 50.8	38959 2.2 14.6	177655 0.6 66.5	109360 1.2 40.9	89576 1.2 33.5	142322 0.8 53.3	130394 0.9 48.8	122793 1.0 46.0	2010 13.8 0.8	120423 1.0 45.1

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE 1987

PAGE 3 OF 6

PRIMARY USE		VOR	NAVIGATION	N EQUIPMENT	ENT		LONG RANGE	NGE NAV	EQUIP	OTHER N	OTHER NAVIGATION EQUIP	N EQUIP
	VOR FOOCH	VOR 200CH	2+ VOR	ADF	DME	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER	NAV EQ
EXECUTIVE	,					1						
ESTIMATED FUPULATION	1284	10714	11290	11381	10861	7098	4305	2791	086	8 102	8506	170
A STANDARD EXKUR	16.2	න ෆ	ю Ю	დ რ	က က	4 .	ر ت	ru œ	11.7	හ ෆ	0.4	47.4
% WITH CAPABILITY	6.8	90.1	94.9	95.7	91.3	59.7	36.2	23.5	8.2	68.1	71.5	4
BUSINESS												
ESTIMATED POPULATION	10399	30222	34601	33750	27700	11473	14356	565	583	4965	8 196	9
	6.2	3.5	2.9	2.9	3.5	0.0	0.6	24.2	25.6	8) G	9.61
% WITH CAPABILITY	26.0	75.6	86.5	84.4	69.3	28.7	35.9	4.	1.5	12.4	20.5	4.4
PERSONAL												
ESTIMATED POPULATION	40906	68777	65531	56680	32533	8481	27308	135	77	2689	2762	19038
% STANDARD ERROR	2.8	.	ل .0	2.1	3.1	8. 9	3.7	40.0	*	12.2	11.7	8
% WITH CAPABILITY	33.1	55.6	52.9	45.8	26.3	6.9	22.1	0.1	0.1	2.2	2.2	15.4
INSTRUCTIONAL												
ESTIMATED POPULATION	4455	9924	6492	6478	3076	486	1050	25	G	115	136	1534
% STANDARD ERROR	ன ன	9.0	დ დ	8	12.0	27.2	20.8	*	*	48.6	44.5	14.6
% WITH CAPABILITY	28.6	63.7	41.7	41.6	19.7	3.1	6.7	0.2	0.1	0.7	6.0	80
AERIAL APPLICATION												
ESTIMATED POPULATION	117	517	235	290	122	36	324	4	0	0	-	5728
% STANDARD ERROR	*	27.0	35.6	32.6	*	*	35.3	*	0.0	*	*	8
% WITH CAPABILITY	-	8 9	დ დ	♣ .5	6 .	0 0	5.0	0.7	0.0	0.1	0.0	88.6
AERIAL OBSERVATION												
ESTIMATED POPULATION	1468	2333	2032	2109	895	225	1500	174	ď	243	101	1097
% STANDARD ERROR	17.2	13.2	14.3	13.9	20.3	42.2	16.1	42.9	39.66	33.4	- 6 - 08	
% WITH CAPABILITY	29.9	47.6	41.5	43.0	18.3	9.	30.6	ω	1.2	O.	ල	22.4
OTHER WORK USE												
ESTIMATED POPULATION	169	609	549	308	80	38	110	0	-	33	49	847
% STANDARD ERROR	4.04	26.7	28.0	36.9	*	*	*	0.0	*	*	*	18.7
% WITH CAPABILITY	10.5	37.7	34.0	19.1	4 .9	2.4	8 .	0.0	0.1	2.0	3.0	52.4
COMMUTER AIR CARRIER		o o	9	,	ć	9		;	,		ı	
& CTANDADA KOBOD	n 2 +	200	, ,	1018	300	332	243	12	on .	501	461	7
S LITTLE CADADAL THE	* ;	75.8	5. G	15.6 0.0	17.4	34.2	27.5	*	*	24.6	21.9	*
A MILL CAPABILITY	ا ان	7) et	92.2	90 90 90	2. 4.	32.6	24.3	~	æ. O	49.1	45.2	0.2

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

TABLE 2 - 18

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1987

PAGE 4 OF 8

PRIMARY USE		VOR	NAVIGATION	ON EQUIPMENT	MENT		LONG RA	LONG RANGE NAV	EQUIP	OTHER A	NAVIGATION	N EQUIP
	100CH	VOR 200CH	2+ VOR	ADF	DAE	RNAV	LORAN	OMEGA	OTHR	RADAR	WEATHER RADAR	NAV EQ
AIR TAXI ESTIMATED POPULATION	408	4585	4695	5418	4302	1724	2091	208	101	1717	2198	198
% WITH CAPABILITY	13.0	74.2	75.9	87.6	69.69	27.9	33.8	3. A.	1.7	27.8	35.6	, w
OTHER ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	814 21.7 14.1	2984 10.0 51.6	1978 12.4 34.2	2434 11.4 42.1	1883 11.7 32.6	737 21.2 12.8	1467 16.0 25.4	108 33.8 1.9	378 19.0 8.3	996 14.6 17.2	747 17.5 12.8	1789 14.1 31.0
INACTIVE ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	12847 4.9 25.9	12367 4.6 24.9	11854 3.6 23.9	10693 4.2 21.5	8888 6.6 8.1 8.	1819 12.1 3.7	2893 12.8 5.8	28.9 0.4	32.8 0.4	1252 12.9 2.5	1795 11.0 3.6	24893 2.3 50.1
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	73242 2.0 27.4	73242 146429 2.0 1.0 27.4 54.8	141449 0.7 52.9	131912 0.9 49.4	89581 1.2 33.5	33142 2.6 12.4	57461 2.3 21.5	4309 8 . 8 8 .	2457 0.0 0.0	21177 2.8 7.9	25508 2 . 4 9 . 5	54359 1.6 20.3

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1987
PAGE

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733 22.5 6.2 11081 5.9 27.7 81163 1.5 65.6 5.4 6257 3.3 96.7 9.9 1399 15.5 86.6 310 26.9 30.4 EQUIP EQUIP 3727 12581 241 32.2 2.0 430 30.3 1.1 515 28.3 0.4 000 000 0.7 000 00 3 AXIS AUTPLT 9813 3.9 82.5 9855 6.0 8.0 677 21.6 4.3 408 26.1 8.3 424 29.1 41.5 4. 1.2 **4**.3 GUIDANCE AND CONTROL EQUIPMENT 2 AXIS AUTPLT 4.9 4.9 12.7 552 27.4 4.6 8020 7.1 20.1 324 39.5 6.6 000 000 ᄗ 00 00 1 AXIS AUTPLT 3215 11.4 8.0 9023 6.7 7.3 503 30.1 3.2 289 39.4 5.9 0.7 0 000 **4**3 00 1256 11.1 10.6 828 20.6 2.1 30.1 000 9.0 0.5 COMPTR 000 000 FLTMGT 9 * 00 00 1080 13.3 9.1 829 22.5 0.7 1170 17.9 2.9 0.5 0.7 0.2 S 9 က 2 9890 3.8 83.1 14701 4.6 36.8 15414 5.1 12.5 20.5 6.5 470 26.1 9.6 693 9.6 94 ß 19. 67. 461 26.8 3.0 8991 3.7 75.6 8968 0.04 FLIGHT DIRECT ø 0 175 45.2 3.6 2.0 460 27.1 45.1 ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY AERIAL OBSERVATION
ESTIMATED POPULATION
% STANDARD ERROR
% WITH CAPABILITY OTHER WORK USE
ESTIMATED POPULATION
% STANDARD ERROR
% WITH CAPABILITY ESTIMATED POPULATION ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY % STANDARD ERROR % WITH CAPABILITY COMMUTER AIR CARRIER AERIAL APPLICATION INSTRUCTIONAL PRIMARY USE EXECUTIVE BUSINESS PERSONAL

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

GENERAL AVIATION AVIONICS EQUIPMENT

BY

PRIMARY USE
1987
PAGE 6 OF 6

PRIMARY USE				GUIDANC	GUIDANCE AND CONTROL EQUIPMENT	NTROL EQ	UIPMENT		
	FLIGHT	HSI	EFIS	FLTMGT	1 AXIS AUTPLT	2 AXIS AUTPLT	3 AXIS AUTPLT	AUTO	KOLIP
AIR TAXI ESTIMATED POPULATION	2243	3213	103	180	114	455	3586	7	1680
% STANDARD ERROR % WITH CAPABILITY	11.8 36.3	9.8	1.7	38.7	* 7.	29.7	8. 6. 8. 6. 0.	* 0.	13.3
OTHER ESTIMATED POPULATION	1176	1419	165	216	6	282	982	424	3799
% STANDARD ERRUR % WITH CAPABILITY	13.2 20.3	24.6	27.5	3.7	* 0	χ, 4 χ, 6	17.0	2. Z	65.7
INACTIVE ESTIMATED POPULATION % STANDARD ERROR	1973 10.9	3633 9_1	270 42.3	150	1168 22.1	1480	3309	345 42.8	42066 1.0
% WITH CAPABILITY	4.0	7.3	0.0	0.3	4.	3.0	6.7	0.7	84.7
TOTAL ESTIMATED POPULATION % STANDARD ERROR % WITH CAPABILITY	29798 2.4 11.2	51569 2.0 19.3	3749 9.0 1.4	3244 8.9 1.2	14679 5.2 5.5	28408 3.4 10.6	45753 1.7 17.1	1688 0.6 0.6	163960 0.7 61.4

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANJFACTURER/MODEL GROUP 1987

PAGE 1 0F 17

MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
OTHER 1	7385.8	1139.7	15.4
OTHER 2	3268.1	1005.0	30.8
OTHER 3	474.7	123.6	26.0
OTHER 4	1161.7	366.9	31.6
OTHER 5	1495.3	580.9	38.8
OTHER 6	9.099	68.1	10.3
OTHER 7	2164.3	603.0	27.9
OTHER 8	0.496	401.2	41.6
OTHER 9	2426.5	441.3	18.2
OTHER 10	1024.6	210.7	20.6
OTHER 11	655.3	166.1	25.4
OTHER 12	616.5	166.0	26.9
OTHER 13	1515.2	654.6	43.2
ADAMS ASOS	35.5	9. 9.	16.7
AERORSJ2	7.0	1.0	14.5
AEROSPAS355	225.9	45.6	20.2
AEROSPSA316	723.8	121.4	16.8
AGUSTA205	207.2	34.1	16.4
AGUSTAA 109	33.9	5.3	15.7
AIRPTSA	511.6	37.3	7.3
AIRSPC18	80. 69	1 .6	16.6

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GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1987

PAGE 2 OF 17

AIRTRCAT300	[IN THOUSANDS]	[IN THOUSANDS]	ERROR (%)
AIRTRCAT400	195.0	33.7	17.3
FALC10	433.3	106.9	24.7
FALC20	1194.7	258.7	21.6
FALCSO	198.7	40.8	20.5
TMK	13.0	0.0	0.0
ARCTICS 1A	242.0	23.9	69. 69.
ARCTICS 1B1	27.2	m.	18.9
	464.9	42.9	9.2
	285.9	26.6	8.3
	464.9	107.8	23.2
	6 .08	7.0	8.6
AVI ANWF ALCON	9.8	9.0	14.7
AVIANWSKYHWK	6. 6	2.2	22.1
	3509.3	349.3	10.0
111	342.7	25.8	7.5
B206	59.3	12.4	21.0
DH125	239.7	20.1	8 0
BALWKSFIREFY	372.3	32.0	9.8
	1352.2	126.0	6.6
	8451.0	421.8	5.0

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MANUFACTURER/ MODEL GROUP

BEECH 100

BBAVIA8

BEECH 17 BEECH 18

STANDARD ERROR (%) PAGE 3 OF 17 STANDARD ERROR [IN THOUSANDS] 101.0 39.0 615.0 8.2 690.2 182.9 32.7 304.0 155.3 416.7 8.7 1315.9 116.4 421.4 GENERAL AVIATION LIFETIME AIRFRAME HOURS AIRCRAFT MANUFACTURER/MODEL GROUP HOURS ESTIMATE [IN THOUSANDS] 106.5 70.6 3774.4 368.1 404.8 977.4 6392.6 1054.1 7416.4 2694.9 24023.8 4057.7 1683.1 5699.5 158.2

BEECH 1900 BEECH 200

9.6 **8**9 30.7 12.0 **9**.0 11.6 . . 5.5 17.0 18.7 9.2 5.2 11.2 80 . 21.7 10.7 20.7

BEECH 56

BEECH 300

BEECH 33 BEECH 35 BEECH 36 BEECH 45 BEECH 50 BEECH 55

BEECH 23

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	PAGE 4 OF 17
GENERAL AVIATION LIFETIME AIRFRAME HOURS	AIRCRAFT MANUFACTURER/MODEL GROUP
By	1987

MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
BEECH 90	8.838.8	495.3	10.0
BEECH 95	2281.5	554.6	24.3
BEECH 99	1334.0	427.8	32.1
BELL 204	867.2	127.5	14.7
BELL 206	8323.1	1076.5	12.9
BELL 212	7.78	131.6	13.7
BELL 222	8.77.8	24.3	31.2
BELL 412	9.14	12.4	29.8
BELL 47	7139.9	576.5	8.1
BLANCA11	167.2	12.1	7.2
BLANCA1413	620.3	285.5	46.0
BLANCA1419	506.3	48.3	6
BLANCA17	1285.7	86.0	6.7
BLANCA7	4060.6	417.5	10.3
BLANCA8	501.4	80.7	16.1
BNORM BN2	417.0	124.4	29.8
BOE ING707	1923.8	126.9	9.9
BOEING727	1299.1	68.3	5 .3
BOEING75	7136.1	484.6	6 0.
BOLKMS105	365.7	122.9	33.6
BOLKMS117	67.7	G. G	14.6

HOURS	۵
RFRAME	AIRCRAFT MANUFACTURER/MODEL GROUF 1987
IME AI	2/MODE
LIFET: BY	ACTUREI 1987
ATION	MANUF
AVI	AFT
GENERAL AVIATION LIFETIME AIRFRAME HOURS BY	AIRCR

PAGE 5 OF 17

			!
MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
BRAERODH125	71.1	20.4	28.7
BRASOVIS28	34.5	æ.	16.3
BRWSTRFLEET2	75.3	10.6	14.1
BRWSTRFLEET7	0.88	11.8	12.4
BUKER 131	63.7	6.7	12.5
CAMRONMODELO	43.8	S. G.	12.7
CASA C212	68.2	9°.3	4.0
CESSNA120	2756.9	287.7	10.4
CESSNA140	7457.9	714.1	9.0
CESSNA150	64201.1	2280.0	9 .
CESSNA170	6646.0	252.1	3.8
CESSNA172	60431.1	1675.0	2.8
CESSNA175	2555.4	147.9	5.8
CESSNA177	5171.6	217.8	4.2
CESSNA180	9116.7	746.2	8.2
CESSNA182	31416.6	1160.1	3.7
CESSNA185	3720.7	364.2	89.
CESSNA188	4194.3	305.9	7.3
CESSNA 190	260.4	18.4	7.1
CESSNA 195	1624.8	7.4.7	4
CESSNA205	678.6	73.3	10.8

HOURS			
AIRFRAME		DEL GROUF	
- AVIA: ION LIFETIME AIRFRAME HOURS	ΒY	AIRCRAFT MANUFACTURER/MODEL GROUF	1001
AVIA: 10N		T MANUFA	
GENERAL		AIRCRA	

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MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
CESSNA206	6872.4	703.5	10.2
CESSNA207	1495.4	426.9	28.5
CESSNA208	9.89	19.2	28.0
CESSNA2 10	12100.7	894.6	4.7
CESSNA303	193.0	29.1	15.1
CESSNA305	1202.5	124.7	10.4
CESSNA310	9787.6	618.9	6.3
CESSNA320	1047.7	52.4	5.0
CESSNA335	8.09	9	10.7
CESSNA336	182.8	12.3	6.7
CESSNA337	2305.3	243.3	10.6
CESSNA340	1560.1	139.8	O . 00
CESSNA401	853.7	0.59	7.6
CESSNA402	3320.9	623.1	18.8
CESSNA404	490.7	44.0	0.6
CESSNA411	676.6	100.8	14.9
CESSNA414	1844.0	177.8	9.6
CESSNA421	3353.7	218.3	6
CESSNA425	280.4	51.6	18.4
CESSNA441	432.6	71.2	16.5
CESSNA500	1497.8	232.3	15.5

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MANUFACTURER/ MODEL GROUP

CESSNA501 **CESSNA650** 17.7 15.8 17.7 17.3 **4**. 13.9 26.9 52.5 = -0.0 23.5 50.9 12.7 12.5

PAGE 7 OF 17	ERROR STANDARD SANDS] ERROR (%)	15.9 20.3	14.1	20.4 13.8	8.0	4.4	15.2 15.8	26.0 17.7	1.1 17.3	13.2 8.4	53.2 13.9	7.3 26.9	65.5 52.5	77.8	0.0	55.5 23.5	672.8 50.9
GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL GROUP 1987	HOURS ESTIMATE STANDARD ERROR [IN THOUSANDS]	78.3	183.9	148.3	7.06	25.1	96.2	146.9	ທ.	157.2	381.7	27.0	124.7	702.2	1449.5	235.7	1322.4
GENERAL AVIAT AIRCRAFT MA																	

15.9

21.0 0.0

55.6 577.0 0.0 303.2

2753.8

179.7

26.8 444.3

CVAC STC580

CVAC BT13

CVAC 240

CURTISTRVAIR CURTISROBIN

1906.0

DHC8

DHAV

_ •

DHAV DHC2 DHAV DHC4

DHAV DHC1

DART

CNDAIRCLGOO

COMVTH185 CNTRAR 101

CONAERLA4 CURTISUR

CESSNAUC94

CHILD S1 CHILD S2

CESSNAT50

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP

	AINCKAFI MANUTACIOKEN/MODEL GROOT		PAGE 8 OF 17
MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
DHAVXXDH82	391.7	38.3	6 0
DOUG A26	72.6	9. 6	13.2
DOUG DC3	6761.6	1779.5	26.3
DOUG DC4	1676.3	73.9	4.4
DOUG DC7	688.0	104.4	15.2
DOUG DC9	2552.0	89. 99	6.0
EAGLE DW	60.2	8.2	13.6
EAGLEBC7	9.2	2.1	23.4
EIRVON20	86.2	0.8	6.8
EMAIR MA1	63.8	0.0	0.0
EMB 110	7.4.7	67.3	0.08
ENSTRMF28	610.8	100.4	16.4
FLEET 168	46.4	8. 4	10.3
FRCHLD24	595.8	62.0	10.4
FRCHLDM62	360.1	26.7	7.4
GENBALAX6	15.1	2.1	13.7
GLASFL201	31.2	4.6	10.8
GLASFLH301	109.2	10.1	9.2
GROB 103CAT	147.9	47.4	32.0
GR0B 109	26.9	6.3	23.6
GROB ASTIR	4.88	4 . 4	13.0

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1987

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
GRTLKS2T1	118.8	21.3	17.9
GRUMANSA 16	30.0	0.0	0.0
GRUMAVAA 1	934.3	50.4	N.
GRUMAVAAS	1575.5	142.5	0.0
GRUMAVG1159	143.2	11.6	8
GRUMAVG164	5541.5	663.7	12.0
GRUMAVTBM	106.2	10.7	10.1
GULSTM112	918.9	94.7	10.3
GULSTM500	1381.1	149.7	10.8
GULSTM520	184.6	84 82.	26.5
GULSTM560	582 . 1	56.4	7.6
GULSTM680	1550.5	227.2	14.7
GULSTNG8OTP	448.1	57.4	12.8
GULSTM690TC	34.4	4.4	11.8
GULSTM890TP	996.5	92.2	හ _ි ග
GULSTMAA1	827.9	59.2	7.1
GULSTMAAS	1194.4	92.1	7.7
GULSTMG1159	1020.3	159.2	15.6
GULSTMG159	1243.4	124.5	10.0
GULSTMG44	430.7	92.5	21.5
GULSTMG73	353.3	13.2	3.7

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1987

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MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
GULSTMGA7	105.4	11.1	10.5
H23/HTE	127.6	30.8	24.1
H34/55	6.86	11.1	11.2
HELIO H295	7.722	46.1	20.3
HELIO H391	56.0	8.2	9.41
HILLERFH1100	147.3	8.8	33.1
HILLERUH12	1815.0	9.161	10.6
HUGHES269	2610.5	361.3	13.8
HUGHES369	2948.1	715.6	24.3
HWKSLYDH104	52.5	41.7	79.5
HWKSLYDH125	807.0	121.9	15.1
HYNES 82	242.0	60.9	25.2
INTRCP200	67.1	10.3	15.3
ISRAEL1121	489.6	60.0	12.2
ISRAEL 1123	45.6	10.	34.0
ISRAEL1124	574.8	72.1	12.5
JBMSTRDGA15	157.0	15.9	10.1
LAIKFN10	20.9	3.4	16.1
LEAR 23	466.4	43.7	4.0
LEAR 24	808.5	86.2	10.7
LEAR 25	1173.8	243.4	20.7

HOURS		
RFRAME		מונים ב
. AVIATION LIFETIME AIRFRAME HOURS		ATDODAET MANIFACTIOED/MODEL COMID
N LIFE	84	IF ACT ID
AVIATI(MAN TH
GENERAL		ATOCAL

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₹ .	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
LEAR 35	1441.9	123.7	10 10
LEAR 55	196. 1	16.9	6 0 80
LET L13	176.4	12.8	7.2
LKHEED12A	153.6	47.7	31.1
LKHEED1329	576.3	6.79	11.8
LKHEED18	474.6	81.8	17.2
LKHEEDPV1	6.89	O`66	13.0
LKHEEDT33	475.2	85.9	18.1
LUSCOM8	5389.5	538.6	10.0
MART IN404	4.769	46.7	6.7
MAULE M4	345.3	46.6	13.5
MAULE MS	374.2	37.6	10.1
MAULE MG	46.2	5. T.	11.1
MCLISHFUNKB	224.6	ð. čt	8 9
MEYERSOTW	126.5	16.0	12.7
MYCOUP90	118.3	11.1	4.0
MWITEM18	148.7	16.0	10.8
MODNEYM20	12552.6	576.9	4.6
MRCHT1S205	49.2	3.2	4.0
MTSBSIMU2	1167.6	9.66	80 NJ
MTSBS1MU300	92.3	89 1	8

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GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
MULTECD16	4.78	15.7	16.1
NAMER B25	165.2	23.2	14.0
NAMER F51	302.4	32.2	10.7
NAMER NA260	692.7	211.1	30.5
NAMER TG	2465.5	1213.2	49.2
NATBAL752	ស	1.0	18.8
NAVAL N3N	452.5	84.7	18.7
NAVIONNAVION	1554.5	161.6	10.4
NORD 3202	22.3	6.1	27.4
NORD SV4	168.7	30.1	18.1
NORWST65	131.5	12.7	7.6
ORLHELH19	235.7	21.9	e. e
ORLHELS58	261.9	0.0	0.0
PARTENP68	54.7	11.5	21.0
PICARDAXG	6.73	6.6	17.1
PILATS84	27.4	7.0	25.5
PIPER 600	500.3	45.9	69 C4.
PIPER E2	22.8	2.6	11.4
PIPER J2	75.2	8.6	11.4
PIPER J3	12412.8	886.1	7.1
PIPER J4	483.6	28.0	ω .

: AIRFRAME HOURS		IODEL GROUP	
GENERAL AVIATION LIFETIME AIRFRAME HOURS	≻ 03	AIRCRAFT MANUFACTURER/MODEL GROUP	1401

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MANUFACTURER/ MODEL GROUP	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
PIPER JS	8.886	56.9	5.7
PIPER PA12	3364.7	382.7	11.4
PIPER PA14	279.8	16.3	89.
PIPER PA15	248.0	23.7	G
PIPER PA16	661.7	97.2	14.7
PIPER PA17	223.5	11.8	e 10
PIPER PA18	10622.9	774.8	7.3
PIPER PA20	934.0	60.5	6.5
PIPER PA22	11515.7	376.3	3.3
PIPER PA23	12186.8	641.9	S. 3
PIPER PA24	9333.1	569.1	6.1
PIPER PA25	3763.6	294.0	7.8
PIPER PA28	58629.5	2528.8	6.4
PIPER PA30	4 181.9	323.3	7.7
PIPER PA31	6162.3	603.9	8.0
PIPER PA31T	1106.4	1.06	80
PIPER PA32	9191.7	509.3	89 89
PIPER PA34	4120.1	314.3	7.6
PIPER PA36	671.2	8. 79	10.1
PIPER PA38	2790.1	234.7	8 3
PIPER PA42	146.5	21.5	14.7

GENERAL AVIATION LIFETIME AIRFRAME HOURS	∆60	AIRCRAFT MANUFACTURER/MODEL GROUP	1987

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MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
PIPER PA44	794.5	113.8	14.3
PIPER PA46	121.4	16.1	13.2
PR0PJT200	138.8	11.9	89.
RAVEN RX6	48.6	æ 10	17.5
RAVEN S50	16.1	6 .	10.2
RAVEN SSS	212.7	27.8	13.1
RAVEN SGO	39.5	ø. Ø.	15.0
RAVEN SGG	22.3	2.1	ي. ق
RKWELLSOO	101.4	12.9	12.7
RKWELL700	26.7	8°.8	12.4
RKWELLNA265	2586.0	529.4	20.5
ROBSINR22	295.3	55.5	18.8
ROLSCHLS	58.9	9.2	15.6
RYAN ST3	419.7	22.1	S. 3.
RYAN STA	9.79	14.1	20.8
SAAB SF340	14.1	1.3	e. e
SCHLERASK21	28.7	6 9.	20.7
SCHLERASW15	36.0	3.2	6 .
SCHLERASW19	21.3	4.3	19.9
SCHLERASW20	43.1	4 .	10.7
SCHLERK8	29.1	2.6	89.

GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1987

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STANDARD ERROR (%)	11.3	12.1	15.1	13.0	13.4	20.7	10.5	2.0	28.2	16.4	10.4	3.11	31.8	18.6	9.9	19.9	13.3	17 9	10.3	43.3	10.3
STANDARD ERROR [IN THOUSANDS]	7.1	122.1	108.1	170.5	4.0	30.2	37.6	4.6	57.7	52.4	45.8	8.96	211.5	15.3	2.4	2.3	6 . 1	7.7	9.2	33.7	9.1
HOURS ESTIMATE [IN THOUSANDS]	63.5	0.1101	715.4	1316.2	e.e	146.1	357.6	232.9	204.3	319.7	441.0	839.2	664.7	82.5	35.9	11.7	14.3	43.0	89.2	9.77	18.5
MANUFACTURER/ MODEL GROUP	SCHLERKAG	SCWZERG164	SCWZERSG1	SCWZERSG2	SEMCO MODELT	SKRSKYS55	SKRSKYS58	SKRSKYS58T	SKRSKYS61	SKRSKYS76	SLINDS 100	SMITH 600	SNIAS 350	SNIAS SA341	SOCATAMS894	SOCATARALLYE	SOCATATB 10	SOCATATB20	SPHRTHCIRRUS	SPHRTHNIMBUS	SPHRTHVENTUS

HOURS		•	
FRAME		GROUF	
ME AIR		/MODEL	
LIFETI	æ	CTURER	4007
SENERAL AVIATION LIFETIME AIRFRAME HOURS		AIRCRAFT MANUFACTURER/MODEL GROUP	
L AVI		RAFT	
GENERA		AIRC	

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MANUFACTURER/ Model Group	HOURS ESTIMATE [IN THOUSANDS]	STANDARD ERROR [IN THOUSANDS]	STANDARD ERROR (%)
STNSON10	283.8	29.4	10.4
STNSONL5	181.1	16.5	.
STNSONSR9	75.9	3.7	⊕
STNSON77	131.4	4.4	10.9
STOLAMRC3	248.7	5.4.3	21.8
SUPAC LA	136.6	11.9	8.7
SUPAC V	24.6	3.9	15.9
SWRNGNSA226	1159.6	100.1	છ .
SWRNGNSA227	294.4	80.6	27.4
SWRNGNSA26	633.7	50.0	7.9
TCRAFK21	6.2	8.0	13.3
TCRAFKD	559, 1	60.2	10.8
TCRAFTA	63.9	7.6	11.9
TCRAFTBC	3775.4	237.3	ю. Ю
TCRAFTBF	93.8	4.00	10.0
TCRAFTBL	604.1	168.3	27.9
TEMCD 11A	46.1	Ø. S	14.1
TH55	209.4	30.8	14.7
THUNDRAX7	12.7	2.7	21.4
TMPSONNAVION	1662.4	158.9	9 .
TRYTEK65	733.8	47.2	₩. ₩

TABLE 2 - 19

PAGE 17 OF 17 STANDARD FRRDR GENERAL AVIATION LIFETIME AIRFRAME HOURS
BY
AIRCRAFT MANUFACTURER/MODEL GROUP
1987 HOURS ESTIMATE

STANDARD ERROR (%)	11.9	12.3	7.2	6.5	13.1	22.7	12.7	5.2	ω ω	17.5	31.4	10.8	1.0
STANDARD ERROP [IN THOUSANDS]	4	150.0	308 . 4	256.6	15.8	14.3	4.	2.6	39.1	20.8	23.2	17.0	6507.4
HOURS ESTIMATE [IN THOUSANDS]	37.8	1219.7	4307.1	3954.2	120.7	63.1	37.4	50.3	463.2	119.0	73.7	156.9	680870.1
MANUFACTURER/ MODEL GROUP	TRYTEKK	UNI VACGC 1	UNIVAR 108	UNIVAR415	VARGA 2150	WACO ASO	WACO GXE	WACO R	WACO UPF7	WACD YK	WSK M18	WTHRLY201	TOTAL AIRCRAFT

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1987

PAGE 1 OF 2

ENGINE	ESTIMATE	PERCENT	ESTIMATE	ESTIMATE	PERCENT
MANUFACTURER/ Model	OF ACTIVE	STANDARD ERROR	OF PERCENT	MEAN	STANDARD
GROUP	POPULATION		ACTIVE	HOURS	
ALLSN 250C	1934	6.33	89.38	563	14.80
ALLSN 501D	129	32.91	68.75	145	6.83
AMTRMCMCCULH	107	30.91	23.71	35	19.37
ARSRCHTFE731	470	8.0	100.00	428	5.47
ᇙ	404	10.65	65.08	247	11.34
	120	17.16	81.24	153	32.22
CONT 975	27	8 .0	100.00	320	8.0
	54	37.61	40.33	4.	22.85
	80	68.48	23.29	30	8
CONT A65	5498	4.98	55.94	69	10.13
CONT A75	1374	9.33	64.96	47	11.15
-	8	351.75	2.73	99	27.32
CONT C125	255	20.15	65.31	67	26.76
CONT C145	1855	5.93	81.92	88	12.38
CONT C85	3696	5.30	59.62	26	60.9
_	1601	7.84	61.87	57	12.30
	1537	8.80	74.33	96	17.10
	1266	7.31	84.60	73	11.30
	13173	2.21	87.18	107	7 . 78
	8521	3.07	84.33	74	6.93
	280	10.82	88.76	96	24.40
	2974	5.09	81.38	113	10.82
CONT 0470	24370	1.42	89.43	113	4.05
	28430	66.0	93.31	192	3.32
CONT R670	563	14.28	52.45	70	11.15
ŝ	56	17.35	55.20	69	15.52
FCD 6440	113	22.54	32.53	31	13.81
FRNKLN4AC176	111	32.39	60.85	33	36.74
FRNKLN4AC199	31	41.98	19.52	80	16.40
FRNKLN6A4150	441	18.72	43.15	52	12.64
FRNKLN6A4165	722	12.39	63.36	51	11.35
FRNKLN6A4200	ಹ	95.60	35.12	75	8
FRNKLN6A8215	9	20.70	29.14	29	20. 15
FRNKLN6AV335	88	13.07	77.39	99	18.80
FRNKLN6AV350	149	15.15	65.24	80	26. 15
FRNKLN6V4	42	74.58	21.51	73	20.88
Z ¥	en :	174.20	5.14	22	55.07
	40 6		00 (00 (299	14.48
GE CJ610	675	7.42		354	9.77
	7.7	17.09) ·	3 8
GE CT58	, (278.66			•
GLADENKS	24	8.0	54.06	38	15.66

TABLE 2 - 20

GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES
BY ENGINE MANUFACTURER/MODEL GROUP
1987

PAGE 2 OF 2

	POPULATION		PERCENT ACTIVE	MEAN	S I ANDARD ERROR
SLADENRS Jacobpr755	149 164	8.02 26.88	80.29 38.04	116 52	29.47
JACOBSR755	123	46.92	33.09		22.56
JACOBSR915 VC 0540	71	0.00	92.85	115 332	6.57
LTS 101	7.1	4.50	44.97	5.4	12.57
0145	109	0.64	85.67	310	7.11
0235	8548	8.23	69.04	65	12.93
0280	23055	0.00 8 4.00	87.73 81.65	55.	0/.4
0340	123	8	90.26	126	3.86
0360	19600	88.88	70.14	164	12.27
0435	946	8.97	61.86	104	11.91
0480	1270	1.24	89.99	238	9 05 8
0540	13604	5.50	90.42	195	11.19
0541	1054	10.93	90.45	212	26.44
0720	100	12.50 36.48	20.08 60.08	5 6	
753) •	156.35	5.5	205	8
NASCOC4	51	8	71.77	239	3.26
DNAN B48	29148	15.44	78.02	04	21.03
PCKARDV 1650	80	8 .0	83.27	258	7 . 50
JT 12	446	0 .0	100.00	325	8.07
JT3C	4.	31.42	26.69	434	13.99
JT3D	on .	239.77	3.70	ទ្ធ	8
410	112	8	100.00	425	80 ·
PT6	1631	49.97	20.00	214	00.0
PT6T	24	8.0	00.68	262	8. 9.
R 1340	941	14.81	39.31	234	15.38
R1830	199	17.36	35.45	216	2.60
R2000	26	32.83	14.74	38	28.58
R2800	324	4.65	45.30	202	11.84
R985	3171	8.52	85.67	464	9.35
RROYCEGIPSY	54	15.21	81.13	256	17 . 82
ALL ENGINES	247056	0.56	81.12	163	1.47

NOTE: ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT LISTED IN THE TABLE, BUT ARE INCLUDED IN THE "ALL ENGINES" ESTIMATES.

TABLE 2 - 21

GENERAL AVIATION FUEL CONSUMPTION BY AIRCRAFT TYPE 1987

	MEAN	ESTIMATED	STANDARD
	RATE		
	BH BH	(milgal)	(milgal)
AIRCRAFT TYPE			
FIXED WING			
•	•		•
ENG 1-3	. 13 . 13	81.35	3.7
4	11.28	155.08	ຕ ຄ
_ _	10.49	236.44	4 8.
2 ENG 1-6 SEATS	26.88	72.21	- . ♦
7+	36.17	83.00	7.9
S EN	30.83	155.21	00
ā	168.82	1.37	50
\vdash			10.1
TIRBOPROP			
2 ENG 1-12 SEATS	82.87	123.95	7.0
ENG 13+	135.61	65.80	
OTAL 2 ENG	93.65	189.75	11.2
	47.00	8.20	o.
_	91.37	197.95	11.4
TURBOJET			
2 ENG	227.27	345.10	17.8
OTHER	514.55	62.65	၁ ၈
TOTAL TURBOJET	249.96	407.76	20.0
TOTAL FIXED WING	26.54	998.72	25.1
ROTORCRAFT			
PISTON	12.79	8.30	8.0
TURBINE	33.40	66.93	
TOTAL ROTORCRAFT	26.65	75.22	6.0
OTHER	3.97	0.46	0,1
TOTAL AIRCRAFT	26.54	1074.41	25.8
TOTAL			
JET FUEL	118.53	672.63	23.8
TOTAL			
AVIATION GASOLINE	13.60	401.77	10.1

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

PAGE 1 OF 18

MANUFACTI GRC	MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal
OTHER	-	7.693	4.553	0.479
OTHER	а	12.537	2.006	0.415
OTHER	ო	32.260	0.300	0. 160
OTHER	4	39.934	0.794	0.715
OTHER	ហ	58.449	0.495	0.349
OTHER	ø	93.386	18.848	4.119
OTHER	7	153.280	19.970	7.651
OTHER	80	39 . 355	2.241	1.365
OTHER	တ	221.135	38.021	7.315
OTHER	10	615.483	16.451	3.908
OTHER	==	8.098	0.844	0.211
OTHER 12	12	61.135	2.856	1.524
OTHER 13	13	3.986	0.415	0.064
ADAMS A50S	A50S	00.000	0.000	000.0
AERORSJ2	20:	10.049	0.005	0.002
AEROSPAS355	AS355	43.457	2.463	0.984
AEROSPSA316	SA316	900.000	0.387	0.660
AGUSTA205	1205	89.999	0.608	0.464
AGUSTAA109	A 109	59.541	0.857	0.188
AIRPTSA	ķ	15.354	0.125	0.033
AIRSPC18	18	10.000	0.013	0.006

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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PAGE

MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
AIRTRCAT300	31.561	4.211	0.512
AIRTRCAT400	00.00	0.000	0.000
AMD FALC10	186.492	10.693	4.852
AMD FALC20	348.469	21.244	4.646
AMD FALCSO	322.729	12.620	2.216
AMTR TMK	00.00	000.0	0.000
ARCRNEH37	00.000	0.000	0.000
ARCT I CS 1A	5.327	0.010	0.003
ARCT I CS 1B 1	7.291	0.003	0.001
ARONCA 15	8.913	0.034	0.017
ARONCA58	4.651	0.011	0.004
ARONCAGS	4.646	0.029	0.011
ARONCAC3	3.906	0.001	0.000
AVIANWFALCON	0.000	000.0	0.000
AVIANWSKYHWK	0.000	000.0	0.000
AYRES S2	41.180	12.430	1.842
BAC 111	800.000	1.784	0.585
BAG B206	40.877	0.044	0.029
BAG DH125	211.636	6.691	1.052
BALWKSFIREFY	00.00	000.0	0.000
BBAVIA11	4 . 445	0.134	0.027

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

3 OF 18

PAGE

MANUFACTURE GROUP	MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
BBAVIA7	21	5.764	1.290	0.172
BBAVIA8	9	9.987	0.222	0.047
BEECH 100	001	84.153	6.690	0.939
BEECH	17	21.933	660.0	0.027
BEECH	18	47.220	4.689	1.201
BEECH	1900	105.798	4 . 339	1.259
BEECH	200	97.113	25.990	3.299
BEECH	23	9.540	2.892	0.355
BEECH	300	95.638	3.116	0.415
BEECH	33	14.082	3.212	0.280
BEECH	35	12.845	7 . 409	0.534
BEECH	36	15.572	5.962	0.460
BEECH	45	13.178	0.257	0.068
BEECH	50	30.826	0.394	0.112
BEECH	55	27.075	6.855	0.663
BEECH	56	46.764	0.395	0.110
BEECH	58	33.147	9.398	1.198
BEECH	90	44.517	2.947	0.444
BEECH	65	39.723	0.320	0.259
BEECH	76	18.846	1.609	0.321
BEECH 77	77	6.319	0.290	0.076

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3		
GENERAL AVIATION FUEL CONSUMPTION	BY MANUFACTURER/MODEL GROUP	1987

			,
MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mílgal)
BEECH 80	40.494	1.077	0.376
BEECH 90	69.789	19.528	2.551
BEECH 95	18.652	0.830	0.149
BEECH 99	85.225	5.213	2.086
BELL 204	81.667	0.573	0.274
BELL 206	28.679	29 . 135	4.292
BELL 212	90.000	3.101	1,113
BELL 222	83.489	1.785	0.577
BELL 412	100 . 000	3.943	1.336
BELL 47	17.162	3.220	0.532
BLANCA11	5.084	0.010	0.002
BLANCA1413	9.107	0.087	0.042
BLANCA1419	12.177	0 .145	0.066
BLANCA 17	14.465	0.979	0.150
BLANCA7	7.068	1.566	0.286
BLANCA8	9.022	0.287	0.040
BNORM BN2	29.176	1.287	0.343
BOE ING707	2000 .000	0.278	0.786
B0E1NG727	1203.935	19.733	4.132
BOE ING75	16.571	1.021	0.205
BOLKMS 105	58.136	1.393	0.268

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
BOLKMS117	69.449	2.269	0.243
BRAERODH 125	227.191	4.253	0.858
BRASOVIS28	0.000	0.000	0.000
BRWSTRFLEET2	7.934	0.011	0.011
BRWSTRFLEET7	9.991	900.0	0.003
BUKER 131	8 . 853	0.013	0.003
CAMRONMODELO	0.000	0.000	0.000
CASA C212	125.281	0.868	0.409
CESSNA120	5.010	0.201	0.030
CESSNA 140	5.366	0.502	0.050
CESSNA 150	5.930	21.987	1.598
CESSNA 170	8.271	1.423	0.183
CESSNA 172	8.447	26.343	1.799
CESSNA 175	9.826	0.488	0.061
CESSNA177	9.556	2.336	0.239
CESSNA 180	12.577	3.219	0.511
CESSNA 182	12.720	19.771	0.931
CESSNA 185	14.751	3.426	0.383
CESSNA 188	18.376	5.760	0.940
CESSNA 190	15.112	0.064	0.012
CESSNA 195	15.043	0.374	0.070

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
CESSNA205	12.852	0.294	0.079
CESSNA206	15.344	6.509	0.832
CESSNA207	15.293	4.426	0.870
CESSNA208	50.000	3. 160	1.007
CESSNA210	15.608	12.071	1.058
CESSNA303	28.472	1.350	0.407
CESSNA305	10.297	0.294	0.052
CESSNA310	29.378	11.238	1.634
CESSNA320	29.521	0.885	0.153
CESSNA335	35.319	0.285	0.037
CESSNA336	19.116	0.044	600.0
CESSNA337	21.382	2.641	0.595
CESSNA340	33.112	5.466	0.671
CESSNA401	28.715	0.954	0.198
CESSNA402	37.862	16.847	4.162
CESSNA404	42.509	0.302	0.957
CESSNA411	33.091	0.254	0.106
CESSNA414	35.823	5.334	0.791
CESSNA421	42.334	12.658	1.776
CESSNA425	67.167	3.927	0.565
CESSNA441	75.576	4 . 607	0.646

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANUFACTL GRC	MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (milgal)
CESSNASOO	1500	162.180	36.551	4. 123
CESSNA501	1501	167 . 495	2.233	0.160
CESSNAG50	(650	191.370	13.148	1.686
CESSNAT50	150	32.427	0.014	600.0
CESSNAUC94	UC94	9.000	0.007	0.003
CHILD S1	S1	10.249	0.038	600.0
CHILD S2	S2	14.944	0.201	0.047
CNDAIRCLEGO		329.539	13.254	1.959
CNTRAR 101	1101	0.000	0.000	000.0
COMMTH185	1185	5.299	0.007	0.003
CONAERLA4	ILA4	10.137	0.350	0.062
CURTISC46	C46	0.000	0.000	000.0
CURTISUR	J.R	3.400	0.000	000.0
CURTISROBIN	ROBIN	10.000	0.000	00.00
CURTIS	CURTISTRVAIR	12.494	0.034	0.011
CVAC	240	200.000	0.245	0.251
CVAC	BT13	24.760	0.038	0.014
CVAC	STC580	302.649	1.044	0.579
DART	g	10.000	0.003	0.002
DHAV	DHC1	9.701	0.061	0.014
DHAV	DHC2	21.433	1.132	0.503

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GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

PAGE 8 OF 18

MANUFACTURER/MODEL	MEAN	ESTIMATED	STANDARD
GROUP	RATE	FUEL USE (mil gal)	ERROR (mil gal)
DHAV DHC3	35.250	0.279	0.025
DHAV DHC4	125.000	0.338	0.000
DHAV DHC6	84.057	7.064	1.927
DHAVXXDH82	7.578	0.022	0.007
DOUG A26	150.000	0.042	0.025
DOUG DC3	98.273	3.171	0.959
DOUG DC4	248.637	0.875	0.291
DOUG DC6	00.000	0.000	0.000
DOUG DC7	0.000	0.000	0.000
DOUG DC8	1791.000	2.884	6.223
DOUG DC9	772.760	16. 162	8.901
EAGLE DW	14.594	0.191	0.047
EAGLEBC7	000.0	00.00	0.000
EIRVON20	3.412	0.030	0.005
EMAIR MA1	000.0	00.000	0.000
EMB 110	85.965	0.601	0.625
ENSTRMF28	13.468	0.941	0.263
FLEET 168	7.317	0.003	0.001
FRCHLD24	10.587	0.018	0.010
FRCHLDC119	00.00	0.000	0.000
FRCHLDM62	11.929	0.049	0.010

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANUTE ACTION OF A MODEL	76.0	CTTMATED	COACMATA
GROUP	RATE	FUEL USE (mil gal)	ERROR (mil gal)
GENBALAX6	0.000	00.00	000.0
GLASFL201	00.00	0.000	0.000
GLASFLH301	0.000	0.000	0.000
GROB 103CAT	0.000	0.000	0.000
GROB 109	4.023	0.017	0.005
GROB ASTIR	00.000	0.000	00.00
GRTLKS2T1	10.548	0.118	0.022
GRUMANSA 16	00.000	000.0	000.00
GRUMAVAA1	6.825	0.338	0.038
GRUMAVAAS	9.356	0.963	0.144
GRUMAVG1159	0.000	0.000	000.0
GRUMAVG164	28 . 159	7.912	1.479
GRUMAVG21	30.000	0.127	0.076
GRUMAVTBM	0.000	000.0	000.0
GULSTM112	11.374	0.743	0.142
GULSTM500	29.428	1.879	0.454
GULSTM520	28.000	0.048	0.038
GULSTM560	34.626	0.260	0.088
GULSTM680	44.123	1.430	0.593
GULSTM680TP	69.094	0.489	0.141
GULSTM690TC	77.467	0.554	0.074

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANJFACTURER/MODEL GROUP 1987

PAGE 10 OF 18

MANUFACTURER/MODEL GROUP	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
GULSTM690TP	82.632	12.810	2.182
GUL STMAA 1	6.415	0.205	0.044
GULSTMAA5	8 . 207	0.796	0.180
GULSTMG1159	400.000	27.483	4.253
GULSTMG159	258.643	11.417	2.424
GULSTMG44	26.410	0.117	0.031
GULSTMG73	95.240	0.666	0.180
GULSTMGA7	16.945	0.204	0.055
H23/HTE	13.830	0.066	0.022
H34/55	000.0	000.0	000.0
HELIO H295	13.186	0 . 152	0.058
HELIO H391	11.362	0.003	0.002
HILLERFH1100	22.672	090.0	0.046
HILLERUH12	19.197	0.912	0.236
HUGHES269	11.243	2.030	0.385
HUGHES369	25.020	3.480	0.793
HWKSLYDH104	00.000	00.00	0.000
HWKSLYDH125	274.882	14.942	2.512
HYNES B2	11.541	0.010	900.0
INTRCP200	14.346	0.036	0.010
ISRAEL 1121	264.991	4.653	1.963

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
ISRAEL1123	356.749	1.694	0.534
ISRAEL 1124	232.382	14.587	2.020
JBMSTRDGA15	21.195	0.029	0.008
LAIKFN10	00.00	0.000	0.000
LEAR 23	297.194	3.569	1.210
LEAR 24	196.274	7.221	3.090
LEAR 25	271.963	30.512	6.633
LEAR 35	203.076	34.414	3.731
LEAR 55	211.237	8 . 867	1.062
LET L13	000.0	0.000	0.000
LKHEED12A	45.920	0.016	600.0
LKHEED1329	463.974	10.579	1.863
LKHEED18	000.0	000.0	0.000
LKHEEDP2V	0.000	00.00	0.000
LKHEEDPV1	183.426	0.121	0.098
LKHEEDT33	288.801	0.108	0.079
LUSCOMB	5.028	0.378	0.068
MARTIN404	190.000	0.005	0.007
MAULE M4	9.776	0.125	0.025
MAULE MS	11.905	0.419	0.054
MAULE MG	10.764	0.104	0.017

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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AANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (milgal)
MCLISHFUNKB	5.155	0.015	0.003
MEYERSOTW	10.207	0.010	0.003
MNCDUP90	7.737	0.005	0.001
MAMITEM 18	4.073	0.017	0.005
MOONEYM20	10 . 128	6.603	0.505
MRCHT15205	10.920	0.013	0.003
MTSBSIMU2	89.338	4.225	1.127
MTSBS1MU300	187.258	4.381	0.614
MULTECD16	18.020	0.017	900.0
NAMER B25	00.000	0.000	000.0
NAMER F51	73.247	0.386	0.079
NAMER NA260	50.000	0.236	0.084
NAMER T6	26.993	0.954	0.327
NATBAL752	00.00	0.000	0.000
NAVAL N3N	13.238	0.014	0.007
NAVIONNAVION	11.393	0.209	0.053
NORD 3202	13.531	0.019	0.008
MORD SV4	8.524	0.008	0.003
NORWST65	4.573	0.003	0.001
ORLHELH19	0.000	0.000	0.000
ORLHELS58	000 0	000.0	0.000

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
PARTENP68	22.955	0.346	0.056
PICARDAX6	000.0	0.000	00.000
PILATS84	00.00	0.000	000.0
PIPER 600	34.426	2.326	0.225
PIPER E2	3.000	00.00	000.0
PIPER J2	3 . 359	0.001	00.000
PIPER J3	4.671	0.924	0.266
PIPER J4	4.718	0.027	0.005
PIPER US	5.962	0 . 105	0.036
PIPER PA12	6 . 469	0.449	0.082
PIPER PA14	8.515	0.040	900.0
PIPER PA15	3.937	0.036	0.008
PIPER PA16	6.824	0.090	0.032
PIPER PA17	4.263	0.013	0.002
PIPER PA18	7.816	3.070	0 . 569
PIPER PA20	7.577	0.193	990`0
PIPER PA22	8.116	1.681	0.197
PIPER PA23	20.968	10.833	2.659
PIPER PA24	12.047	3.372	0.411
PIPER PA25	14.320	2.619	0.516
PIPER PA28	9.447	24.636	1.299

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GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

	BT MANUFACIUREK/MUDEL GRUUP 1987	סטבר פאטטף	PAGE 14 OF 18
MANUF ACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
PIPER PA30	15.329	2 . 445	0.324
PIPER PA31	38.318	27.861	6. 161
PIPER PA31T	74.128	10.263	1.639
PIPER PA32	15.389	10.413	1.278
PIPER PA34	22.578	7.682	906 . 0
PIPER PA36	19.830	1.298	772.0
PIPER PA38	6. 199	2.635	0.602
PIPER PA42	95.472	4.113	0.458
PIPER PA44	19.001	1.610	0.273
PIPER PA46	17.056	1.152	0.114
PR0PJT200	14.759	0.053	0.012
RAVEN RX6	000.0	00.00	000.0
RAVEN S50	000.00	00.00	000.0
RAVEN SS5	000.0	000.0	000.0
RAVEN S60	000.00	00.00	000.0
RAVEN SG6	00.00	00.00	000.0
RK#ELL500	32.958	0.245	0.038
RKWELL700	39.058	0.235	0.048
RKWELLNA265	307,538	28.747	3.115
ROBSINR22	7.766	0.401	0. 162
ROLSCHLS	000.0	000.0	000.0

TABLE 2 - 22

L AVIATION FUEL CONSUMPTION	/ MANUFACTURER/MODEL GROUP	1987
ENERAL AVIATI	BY MANUFACT	
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MANUFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (milgal)
RYAN ST3	9.573	0:030	0.007
RYAN STA	6.811	0.003	0.001
SAAB SF340	150.000	1.380	0.245
SCHLERASK21	0.000	000.0	000.0
SCHLERASW15	0.000	0.000	0.000
SCHLERASW19	0.000	000.0	0.000
SCHLERASW20	0.000	000.0	0.000
SCHLERK8	0.000	000.0	000.0
SCHLERKAG	0.000	000.0	0.000
SCWZERG164	30.414	0.992	0.443
SCWZERSG1	0.000	0.000	0.000
SCWZERSG2	0.000	0.000	0.000
SEMCO MODELT	0.000	0.000	0.000
SKRSKY S55	30.688	0.031	0.016
SKRSKYS58	0.000	0.000	0.000
SKRSKYS58T	110.000	0.881	0.324
SKRSKYS61	160.235	1.013	0.483
SKRSKYS76	117.371	8.902	2.703
SLINDS 100	9.040	0.181	0.042
SMITH 600	31.039	4.329	1.513
SNIAS 350	37.664	2.853	0.937

TABLE 2 - 22

GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANJFACTURER/MODEL Group	MEAN RATE GPH	ESTIMATED FUEL USE (mil gal)	STANDARD ERROR (mil gal)
SNIAS SA318	0.000	00.00	0.000
SNIAS SA341	38 . 162	0.174	0.047
SOCATAMS894	11.518	0.064	0.029
SOCATARALLYE	8.641	0.010	0.003
SOCATATB 10	8.941	0.050	0.021
SOCATATB20	13.946	0.279	0.072
SPHRTHCIRRUS	000.0	000.0	0.000
SPHRTHNIMBUS	00.000	0.000	0.000
SPHRTHVENTUS	00.00	0.000	0.000
STBROSSD3	150.000	6.586	0.055
STNS0N10	5.296	0.011	0.004
STNSONL5	11.111	0.035	0.010
STNSONSR9	15.207	0.002	0.001
STNSONV77	16.318	0.019	0.004
STOLAMRC3	13.762	0.031	0.008
SUPAC LA	5.377	0.008	0.002
SUPAC V	5.949	0.001	0.000
SWRNGNSA226	87.332	6.638	1.386
SWRNGNSA227	94.985	6.714	1.717
SWRNGNSA26	69 . 482	1.226	0.399
TCRAFK21	6.098	600.0	0.002

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GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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MANJFACTURER/MODEL GROUP TCRAFKD	MEAN RATE GPH 4.759	ESTIMATED FUEL USE (mil gal) 0.052	STANDARD ERROR (mil gal) 0.015
TCRAFTA	0.000	00.00	0.000
TCRAFTBC	4.295	0.351	0.075
TCRAFTBF	3.849	0.005	0.001
TCRAFTBL	4.303	0.014	0.005
TEMCO 11A	11.738	0.003	0.002
TH55	10.912	0.015	0.011
THUNDRAX7	00.00	0.000	000.0
TMPSONNAVION	12.122	0.607	0.294
TRYTEK65	4.257	0.025	0.005
TRYTEKK	4.000	0.000	00.000
UNI VACGC 1	9.033	0.312	0.095
UNI VAR 108	10.001	0.544	0.076
UNIVAR415	5.065	0.318	0.044
VARGA 2150	8.280	0.090	0.013
WACO ASO	10.980	0.002	0.001
WACO GXE	6.954	0.002	0.001
WACO R	8.014	0.001	000.0
WACO UPF7	13.754	0.059	0.017
WACO YK	13.631	0.005	0.002
WSK M18	0.000	0.000	000.0

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GENERAL AVIATION FUEL CONSUMPTION BY MANUFACTURER/MODEL GROUP 1987

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GETANTES MARK

STANDARD ERROR (mil gal) 0.035 14.764 ESTIMATED FUEL USE (mil gal) 0.284 1073.483 22.873 26.540 MEAN RATE GPH MANUFACTURER/MODEL GROUP WTHRLY201 TOTALS

TABLE 2 - 23

GENERAL AVIATION FUEL CONSUMPTION BY AIRCRAFT TYPE AND FUEL GRADE 1987

PAGE 1 OF 3

			FUEL		i	
AIRCRAFT TYPE	80 OCTANE	100 OCTANE	100 LOWLEAD	AUTO GAS	JET FUEL	TOTAL
FIXED WING						
PISTON						
1 ENG 1-3 SEATS			,	1	•	•
MEAN GPH	7.78	88.6	8.24	8 . 28	8:0	e .
FUEL USE (mil gal)	10.88	14.99	38.91	15.80	8.0	81.35
STD ERROR (mil gal)	0.94	1.66	3.78	1 .83	8.	3.23
1 ENG 4+ SEATS					,	;
MEAN GPH	10.12	11.82	11.34	9.92	8.	11.28
FUEL USE (mil qal)	10.96	37.70	99 . 15	6 .93	8.	155.08
STD ERROR (mil gal)	0.39	1.24	2.73	0.24	8.0	3.49
TOTAL 1 ENG						
	86.8	11.27	10.35	9.54	8.	10.49
FUEL USE (mil gal)	21.84	52.69	138.06	22.73	8.0	236.44
STD ERROR (mil gal)	1.02	2.07	4.66	1.85	8 .0	4.76
2 EMC 1-8 SEATS						
}		27.37	26.73	17.33	8.0	26.88
FUEL USE (mil dal)	0.27	12.35	59.27	0.20	°.8	72.21
STD ERROR (mil gal)		66.0	4 .59	0.05	8.0	4. 10
2 ENG 7+ SEATS					;	
i	47.88	34.58	35.95	50.67	8.	36. 17
FUEL USE (mi) qal)	0.08	14.36	67.34	0.53	8.	83.00
STD ERROR (mil gal)	0.03	2.14	10.75	0.23	8.0	7 . 89
TOTAL 2 ENG						
	18.77	30.63	30.73	25.90	8	30.83
FUEL USE (mil gal)	0.35	26.71	126.61	0.73	8	155.21
STD ERROR (mil gal)	0.07	2.36	11.69	0.23	8.0	68 80 80
OTHER PISTON					,	
MEAN GPH	25.37	121.80	186.23	8.	8.0	168 . 82
FUEL USE (mil gal)	0.02	0.16	1.21	8.0	8.	1.37
STD ERROR (mil gal)	0.02	0.17	0.42	8.0	8.0	0.48
TOTAL PISTON						
MEAN GPH	80 · 68		14.21	9.72	8.0	13.62
FUEL USE (mil gal)	22.20	79.55	265.88	23.47		393.02
STD ERROR (mil gal)	1.02		12.59	1.86		10.09

TABLE 2 - 23
GENERAL AVIATION FUEL CONSUMPTION
BY AIRCRAFT TYPE AND FUEL GRADE
1987

PAGE 2 OF 3

			FUEL GRADE			
AIRCRAFT TYPE	80 OCTANE	Ž	100 LOWLEAD	AUTO GAS	JET FUEL	TOTAL
TURBOPROP						
2 ENG 1-12 SEATS MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888	888	888	888	83.20 124.21 7.40	62.87 6.95 8.95
2 ENG 13+ SEATS MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888	888	888	888	133.48 65.81 9.30	135.61 65.80 8.82
TOTAL 2 ENG MEAN GPH FUEL USE (m;] gal) STD ERROR (mil gal)	888	888	888	888	83.43 190.02 11.88	93.65 189.75 11.23
OTHER TURBOPROP MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888	888	888	888	47.01 8.20 4.44	47.00 8.20 1.85
TOTAL TURBOPROP MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888	888	888	888	91.13 198.22 12.89	81.37 197.95
TURBOJET						
2 ENG MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888	888	888	888	228.48 345.78 19.90	227.27 345.10 17.83
OTHER MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888.	888	888	888	514.86 62.67 9.43	514.55 62.65 9.02
TOTAL TURBOJET MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	88 88 88 88	888	888	888	251.75 408.45 22.02	249.96 407.76 19.99

TABLE 2 - 23

GENERAL AVIATION FUEL CONSUMPTION BY AIRCRAFT TYPE AND FUEL GRADE 1987

PAGE 3 OF 3

			FUEL GRADE			
AIRCRAFT TYPE	80 OCTANE	100 OCTANE	100 LOWLEAD	AUTO GAS	JET FUEL	TOTAL
TOTAL FIXED WING MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	9.08 22.20 1.02	13.82 79.55 3.14	14.21 265.88 12.59	9.72 23.47 1.86	158.68 606.68 25.41	26.54 998.72 25.12
ROTORCRAFT						
PISTON MEAN GPH FUEL USE (mil gal) STO ERROR (mil gal)	7.34 0.05 0.02	14.47 1.63 0.19	12.72 6.25 0.63	7.74 0.16 0.03	888	12.79 8.30 0.79
TURBINE MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888	888	888	888	33.31 66.96 26.83	33.40 66.93 5.93
TOTAL ROTORCRAFT MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	7.34 0.05 0.02	14.47 1.63 0.19	12.72 6.25 0.63	7.74 0.16 0.03	33.31 66.96 26.83	26.65 75.22 8.01
OTHER MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	888.	3.57 0.01 0.02	90.0 80.0 80.0 80.0 80.0	& O O & & & & & & & & & & & & & & & & &	888	3.97 0.46 0.06
TOTAL AIRCRAFT MEAN GPH FUEL USE (mil gal) STD ERROR (mil gal)	9.07 22.25 1.02	13.83 3.15 15	14.17 272.16 12.81	9.70 24.06 1.95	118.03 673.64 36.95	26.54 1074.41 25.83

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

GENERAL AVIATION MILES FLOWN BY AIRCRAFT TYPE NAUTICAL MILES (IN THOUSANDS) 1987

PAGE 1 OF 2

AIRCRAFT TYPE	r TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSER	WORK	W	TAXI	OTHER	TOTAL
FIXED WING												
FIXED WING - PISTON	- PISTON											
1 ENG: 1-3	1-3 SEATS	254	19811	289037	237961	116649	26418	9426	33	•	18683	718273
1 ENG: 4+	SEATS	23890	418632	703911	124305	4475	56826	13263	29792	60881	10720	1446696
1 ENGINE:	TOTAL	24145	438443	992948	362266	121124	83244	22689	29826	60881	29404	2164970
2 ENG: 1-6 SEATS	SEATS	48198	185639	76230	12277	554	3865	8	305	52882	3020	383029
2 ENG: 7+ SEATS	SEATS	56611	60377	18097	1870	267	7326	6246	86979	86246	10467	334787
, 2 ENG:	TOTAL	104809	246017	94327	14147	1121	11191	6304	87284	138129	13486	717816
PISTON	OTHER	0	0	20	4	1547	0	•	•	1533	122	3294
PISTON	TOTAL	128954	684460	1087326	376454	123792	94436	28994	117110	201543	43012	2886079
FIXED WING	FIXED WING - TURBOPROP											
2 ENG: 1-12 SEATS	SEATS	170495	30961	3514	6387	139	•	•	34298	30336	9370	285499
2 ENG: 13+	SEATS	23313	1143	86	89	0	965	1271	51054	12817	2664	93381
2 ENGINE:	TOTAL	193807	32104	3599	6455	139	965	1271	85352	43153	12035	378880
TURBOPROP:	OTHER	154	0	5	•	7295	2173	•	5712	10510	1849	27744
TURBOPROP:	TOTAL	193961	32104	3650	6455	7434	3138	1271	91064	53662	13884	408624

TABLE 2 - 24

GENERAL AVIATION MILES FLOWN BY AIRCRAFT TYPE NAUTICAL MILES (IN THOUSANDS) 1987

PAGE 2 OF 2

AIRCRAFT TYPE	. TYPE	EXEC	BUS	PERS	INSTR	APPL	OBSER	WORK	COMP	TAXI	OTHER	TOTAL
FIXED WING - TURBOJET	- TURBOJET											
2 ENGINE TURBOJET	RBOJET	417315	45053	515	161	•	0	•	1946	71736	31277	568003
TURBOJET:	OTHER	34135	9346	664	21	0	0	ო	0	0	6476	50645
TURBOJET:	TOTAL	451450	54399	1179	182	0	0	ო	1946	71736	37754	618648
FIXED WING: TOTAL	TOTAL	774365	770962	1092155	383092	131226	97574	30268	210120	326941	94649	3911351
ROTORCRAFT:												
PISTON		122	2344	1680	6301	8919	10807	1822	0	433	4769	37197
TURBINE		25634	4047	1413	318	8808	18516	2692	250	38966	11704	113348
ROTORCRAFT: TOTAL	TOTAL	25757	6391	3083	66 19	18728	29323	4514	250	39399	16473	150546
OTHER		121	115	6693	2024	0	0	0	0	0	551	9504
TOTAL		800242	777487	777467 1101941	391735	149954	126896	34781	210370	366340	111674	4071400

TABLE 2 - 25 NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS

DICALIZER SESTIMATE SEST					1987					PAGE	E 1 0F 2
ESTIMATE ESTIMA			-	8	m	4	ហ	w		60	TOTALS
ROULINN X 1.1 1.3 18.8 35.4 0.0 0.	œ	ESTIMATE % STD ERR	181	203 6.9	2658 12.8	8782	r * (4 * (12.8	1235 19.2	15853 5. 1
FESTIMATE 4 23 397 4362 3 100 1658 2484 13.3 FOLLINEN K 0.0 0.3 4.4 46.8 9.0 1 18.4 27.2 13.3 FOLLINEN K 0.0 0.3 4.4 46.8 9.0 1 18.4 15.3 13.3 FOLLINEN K 0.0 0.3 13.0 13.0 23376 34.4 5.9 18.9 18.9 18.4 1 53384 FOLLINEN K 0.2 0.1 11.3 23.9 0.4 18.0 18.9 18.9 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0		ROW % COLUMN %	- 0 - 3	. . . 0	ō. ∠ ∞ rù	13.6 13.6) O S &	9 6	D: / B	. .	ις φ.
FE. STIDERR S S S S S S S S S S S S S S S S S S	œ	ESTIMATE	4	23	397	4362	ო	8	1658	2484	9031
PE STIMATE 201 10 22376 424 5.9 5.5 5.5 5.5 5.5 5.5	EACON	% STD ERR	* *	*	34.2	10.1	*	48.7	16.2	13.3 6.13	6 9
ESTIMATE STOCKER STO		ROW %	0.0	o	4.4	48.3	0	- ·	4.8	27.5	,
FESTIMATE STIMATE STATE		7	0.0	0.1	- , - -	89. 89.	•	თ. თ.	ru ru	e	₩ •
PE. STD ERR 37.7 * 18.0 4.1 30.9 35.8 4.7 2.1 PE. WAYN X 0.2 0.5 3.7 36.3 4.1 30.9 35.8 4.7 2.1 COLUMN X 0.8 0.5 3.7 36.3 46.4 19.0 61.7 69.4 3.1 PE. % STD ERR *<	MARKER	ESTIMATE	291	8	1310	23376	424	324	18441	53364	97619
FER ESTIMATE 81 36 58 369 132 90 454 18.9 54.7 10.0 LINN % 0.8 0.1 1.3 3.7 36.3 49.8 19.0 61.7 69.4 11.5 COLUMN % 0.8 0.2 0.2 0.2 19.0 0.7 5.3 18.9 54.7 11831 30402 61.7 60.4 10.2 0.2 0.2 10.6 15.5 5.3 1.5 24.2 24.2 20.0 0.3 13.7 12.4 5.6 22.0 0.8 19.3 1.5 24.2 24.2 20.0 0.3 13.7 12.4 5.6 22.0 0.8 19.1 1831 30402 61.7 60.8 13.7 12.4 5.6 22.0 0.8 19.1 49.1 1934 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.	GLIDE SLOPE	% STD ERR	37.7	*	18.0	4. 4	30°9	35.8	4.7	2.1	1.3
COLLINN % 0.8 0.5 3.7 36.3 49.8 19.0 61.7 69.4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		ROW %	e .	0.	-	23.9	₹.0	e.0	18.9	54.7	
ER ESTINATE ROW % COLUMN		7	8.0	0.5	3.7	36.3	8.8	19.0	61.7	6 9 . 4	36.5
LOPE, % STD ERR	ER. MARKER	ESTIMATE	28	36	82	369	132	08	454	18601	19820
ROW % 0.4 0.2 0.3 1.9 0.7 0.5 2.3 2.3 83.8 84.0 0.2 0.2 0.2 0.6 15.5 5.3 1.5 24.2 0.1 0.1 0.2 0.2 0.2 0.2 0.6 15.5 5.3 1.5 24.2 0.2 0.2 0.2 0.2 0.6 15.5 5.3 1.5 24.2 0.2 0.2 0.2 0.2 0.6 15.5 5.3 1.5 24.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	GLIDE SLOPE,		*	*	*	28.0	#	* I	90.0	o 6	79 N
COLUMN % 0.2 0.2 0.2 0.6 15.5 5.3 1.5 24.6 A, % STD ERR 47.8 13.7 12.4 5.6 39.8 28.0 6.0 3.0 COLUMN % 0.5 11.5 8.0 21.2 31.7 30.3 39.6 39.5 39.5 20.0 3.0 COLUMN % 0.4 0.6 0.7 2.4 0.6 0.6 3.3 39.6 39.5 20.1 30.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.5 20.0 39.6 39.6 39.5 20.0 39.6 39.6 39.5 20.0 39.6 39.6 39.5 20.0 39.6 39.6 39.5 20.0 39.6 39.6 39.6 39.6 39.5 20.0 39.6 39.6 39.6 39.6 39.6 39.6 39.6 39.6	LTIMETER	% ₹0 %	4.0	0.5	e .	o .	, 10.	O 1	, 13 10	20 C	t
A, % STD ERR 47.8 13.7 12.4 5.6 39.8 28.0 6.0 3.0 3.0 3.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5			0.2	0.5	0.5	9 .	5.5	m G		7.47	4
A, % STD ERR 47.8 13.7 12.4 5.6 39.8 28.0 6.0 3.0 30.0 30.0 30.0 30.0 30.0 30.0		ESTIMATE	205	2298	2813	13646	270	517	11831	30402	61981
ROW % COLUMN % CO.3 3.7 4.5 22.0 C.4 C.8 19.1 49.1 49.1 COLUMN % C.5 11.5 8.0 21.2 31.7 30.3 39.6 39.5		% STD ERR	8. 74	13.7	12.4	S.	39.8	28.0	9 (o. 6	2.1
ESTIMATE 88 11.5 8.0 21.2 31.7 30.3 39.6 38.5 39.5 44.5 <t< td=""><td></td><td>ROW %</td><td>ю. О</td><td>3.7</td><td>4. 10.</td><td>22.0</td><td>4.0</td><td>89. O</td><td>19.</td><td>F</td><td></td></t<>		ROW %	ю. О	3.7	4. 10.	22.0	4.0	89. O	19.	F	
ESTIMATE 88 134 152 517 132 123 689 19343 2.9 ROW W STD ERR * 43.1 47.1 25.0 * 48.9 24.5 2.9 ROW W 0.4 0.6 0.7 2.4 0.6 0.6 3.3 91.3 NG ESTIMATE 60 51 182 251 61 99 162 145.5 ROW % 3.0 2.5 9.1 12.5 3.0 4.9 8.1 57.0 COLUMN % 0.2 0.3 0.5 9.1 12.5 5.8 0.5 1.5 LOPE % STD ERR 0.0 2.5 9.1 12.5 5.8 0.5 0.5 0.4 9 0.5 0.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.5 1.6 1.5 1.6 1.5 1.5 1.6 1.5 1.5 1.5 1.5 1.5 <td></td> <td>z</td> <td>0 .s</td> <td>11.5</td> <td>89</td> <td>21.2</td> <td>31.7</td> <td>30°3</td> <td>39. G</td> <td>38 . 8</td> <td>23.2</td>		z	0 .s	11.5	8 9	21.2	31.7	30°3	39. G	38 . 8	23.2
% STD ERR * 43.1 47.1 25.0 * 48.9 24.5 2.9 ROW % 0.4 0.6 0.7 2.4 0.6 0.6 3.3 91.3 COLUMN % 0.2 0.7 0.4 0.8 15.5 7.2 2.3 25.1 NG ESTIMATE 60 51 182 251 61 99 162 1145 ROW % 3.0 2.5 9.1 41.3 * * 44.5 18.2 ROW % 0.2 0.3 0.5 0.4 7.2 5.8 0.5 1.5 LOPE % STD ERR 0.0 2 29 40 9 0.0 59 1102 ROLUMN % 0.0 0.2 2.3 3.2 0.7 0.0 59 1102 ACLUMN % 0.0 0.2 2.3 3.2 0.7 0.0 59 1102 ACLUMN % 0.0 0.0 0.1 0.1 0	TIMETER	ESTIMATE	80	134	152	517	132	123	689	19343	21177
ROW % 0.4 0.6 0.7 2.4 0.6 0.6 3.3 91.3 COLUMN % 0.2 0.7 0.4 0.8 15.5 7.2 2.3 25.1 ESTIMATE 60 51 182 251 81 99 162 1145 ROW % 3.0 2.5 9.1 12.5 3.0 4.9 8.1 57.0 COLUMN % 0.2 0.3 0.5 0.4 7.2 5.8 0.5 1.5 ESTIMATE 0 2 29 40 9 0.5 1.5 ROW % 0.0 2 2.3 3.2 0.7 0.0 4.8 88.9 COLUMN % 0.0 0.0 0.1 0.1 0.1 0.7 0.0 0.2 1.4		% STD ERR	*	43.1	47.1	25.0	*	48.9	24.5	6.7	7 8 8
ESTIMATE 60 51 182 251 61 99 162 1145 7 8 8 1 8 2 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 1 8 2 8 8 1 8 2 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 2 8 8 1 8 8 8 9 8 1 8 8 8 9 8 1 8 8 8 9 8 1 8 8 8 9 8 1 8 8 8 9 8 1 8 1		ROW &	₹.	9.0	0.7	2.4	9.0	9.0	ლ ლ	91.3	
ESTIMATE 60 51 182 251 61 99 162 1145 % STD ERR *		2	0.2	0.7	4 .0	8 9.	<u>ਹੈ</u> ਨ	7.2	6 ,3	25.1	7 .9
% STD ERR # # 44.5 # 44.5 # 44.5 # 44.5 # 44.5 # 44.5 # 44.5 # 44.5 # 44.5 # 57.0 ROW % 3.0 2.5 9.1 12.5 3.0 4.9 8.1 57.0 COLUMN % 0.2 2.5 9.1 40 9 0.5 1.5 ESTIMATE 0 2 29 40 9 0.0 59 1102 % STD ERR 0.0 1 4 4 4 88.9 ROW % 0.0 0.0 4.8 88.9 COLUMN % 0.0 0.0 0.1 0.1 1.1	VE I ANDTAG	ESTIMATE	9	ř.	182	251	9	6	162	1145	2010
ROW % 3.0 2.5 9.1 12.5 3.0 4.9 8.1 57.0 COLUMN % 0.2 0.3 0.5 0.4 7.2 5.8 0.5 1.5 ESTIMATE 0 2 29 40 9 0 59 1102 % STD ER 0.0 * * * * * 18.8 ROW % 0.0 0.2 2.3 3.2 0.7 0.0 4.8 88.9 COLUMN % 0.0 0.0 0.1 0.1 1.1 0.0 0.2 1.4		STD FRR	*	*	49.7	41.3	*	*	44.5	18.2	13.8
COLUMN % 0.2 0.3 0.5 0.4 7.2 5.8 0.5 1.5 ESTIMATE 0 2 29 40 9 0 59 1102 % STD ERR 0.0 * * * * * 18.8 ROW % 0.0 0.2 2.3 3.2 0.7 0.0 4.8 88.9 COLUMN % 0.0 0.0 0.1 0.1 1.1 0.0 0.2 1.4		20 AO	3.0	2.5	-	12.5	3.0	4 .00	8	57.0	
ESTIMATE 0 2 29 40 9 0 59 1102 % STD ERR 0.0 *		COLUMN %	0.5	6.0	0.5 5	0 4	7.2	ر 8	o. 8	— ru	8 .
% STD ERR 0.0 * * * 18.8 ROW % 0.0 0.2 2.3 3.2 0.7 0.0 4.8 88.9 COLUMN % 0.0 0.0 0.1 0.1 1.1 0.0 0.2 1.4		ESTIMATE	0	8	29	4	ŋ	0	50	1102	1240
ROW % 0.0 0.2 2.3 3.2 0.7 0.0 4.8 88.9 COLUMN % 0.0 0.0 0.1 0.1 1.1 0.0 0.2 1.4	GLIDE SLOPE		0	*	*	*	*	0.0	*	18.8	17.9
COLUMN % 0.0 0.0 0.1 0.1 1.1 0.0 0.2 1.4	VE LANDING		0	0.5	2.3	3.5	0.7	0.0	4	88.9	
		COLUMN %	0.0	0.0	0.1	0.1	1.1	0.0	0.5	4.	0

TABLE 2 - 25 NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS

				1987					PAGE	iE 2 OF 2
		-	8	ო	4	ហ	σ	7	60	TOTALS
LONG RANGE NAV, MICROWAVE LANDING	ESTIMATE % CTD FDD	0 0	<u>ō</u> ,	6 4	8 -	0	84	121	610	846
SYSTEM	ROW S	00	1.2	0 4.	2.1	o o	* Ø.	1 4 .3 *	23.6 72.1	19.7
	COLUMN %	0.	0	0.0	0.0	0.0	4 .	4.0	0.8	0.3
NO REGULATORY	ESTIMATE	37343	17282	28613	22381	171	786	4369	G C C	111835
AVIONICS	% STD ERR	2 5	4 i	₩.	4.4	45.8	21.1	10.3	22.0	-
	COLUMN %	* O . 86	86. 66. 67.	25.6 80.9	34.7	20.1	0.7 46 .0	9.8 8.9	0.8 1.2	41.8
ALL AIRCRAFT	ESTIMATE	38 107	19970	35368	64426	852	1709	29883	76915	287400
	% STD ERR	7.5	တ ၊ က ၊	3.0	2.1	22.3	14.6	3.6	4.	
	2	. 4. . 5.	7.5	13.2	24.1	ღ. 0	9.0	11.2	28.8	

NO REGULATORY AVIONICS

450000

TWO-WAY COMMUNICATIONS
TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; VOR OR ADF OR RNAV
TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; VOR OR ETRANSPONDER; VOR OR RNAV
TWO-WAY COMMUNICATIONS; TWO SYSTEMS: AIR TAXIS; AO96 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
TWO-WAY COMMUNICATIONS: AO96 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT, VOR
TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; AO96 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV

* - % STANDARD ERROR GREATER THAN 50%

ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

NOTE:

TABLE 2 - 26 PRIMARY USE VS. HIERARCHICAL CAPABILITY GROUPS

									PAGE	E 1 OF 2
		, .	8	. 88. 3	4	ហ	w	^	•••	TOTALS
		9	ő	118	865	ស	4	458	10846	12512
EXECUTIVE	ESTIMATE	<u>•</u> •	. 48 . C	*	21.0	*	*	29.6	က (90 170
	S SID ERR	٠ ٥) a	6 0	6. 9	0.0	0.0	3.7	86.7	,
	KOW %	n er,	, o	0.3	1.3	9.0	0.5	r.	14.1	
										1
		0	603	1814	8592	240	203	4195	25456	41832
BUSINESS	ESTIMATE	n (200	4	7.0	41.3	40.3	10.3	3.4	7
	% STD ERR	23.2	6.0. 10.0	•	20.00	9.0	0.5	0.0	8 0. 8	1
	20K %	- -	n 6	ינו ז ה כ	13.3	28.2	11.9	14.0	33.1	5.6
		<u>.</u>	! •							
				1	40061	234	318	18194	28059	133533
PERSONAL	ESTIMATE	13618	10284	22764	چ چ	42.4	37.2	4	S	0.
	% STD ERR	4.6	5.7	ים מיני	n (0	13.6	21.0	
	ROW %	10.2	7.7	0.7.	9 6	, C	. α	6 09	36.5	49.9
	COLUMN %	35.7	51.5	64.4	7.79	6.77		<u>.</u>	 - - -	
						ţ	ì	,	2222	16273
TAICTTONA	FSTIMATE	850	835	2625	6570	t T	r i	7 2	14.2	4
TUST LOCK TOWN	S CHO	19.7	21.1	13.3	89	* '	* (7 9		•
	300	5.2	5.1	16.1	40.4	0	n 0	- • • •	. 0	·
	COLUMN	7.7	4.2	7.4	10.2	æ.	3.8	*	9.	·
										1
		6673	942	199	347	0	57	64	117	7260
AERIAL	ESITANE CON 100		1, 2	4 8	35.5	0.0	*	25.8	+ (n
APPLICATIONS	% SID ERR	, d		2.7	4	0.0	89 .	69 .	٠.	•
	#04 F	4.0	7	0 0	0.5	0.0	ო ო	0.5	0.7	7.7
	2000	•								
		,	ć	0	1327	o	27	1012	1027	5364
AERIAL	ESTIMATE	0 0 0	0 TO C	20°5	0.61	0.0	*	20.6	19.7	80 80
OBSERVATION	% STD EKK	77.7	2 5	. . .	24.7	0.0	0.5	18.9	19.1	•
	COLUMN %			~	2.1	0.0	- •	€. 4.	.	7.0
									Š	
	STANTAGE	24.1	649	165	330	0	-11	237	2 1	71 01
OTHER WORK USE	S CHO COD	78 7	22.3	*	36.2	0.0	47.9	37.8	* •	•
	7 X X X X X X X X X X X X X X X X X X X	, c	9 C	. 00	18.2	0.0	.	13.1	4 ((
	800	<u>.</u>	6	6	0 .5	0.0	9	.	5	· •
	COLUMN %	9) •						
!		c	c	149	57	0	٥	70	822	8:
COMMUTER AIR	ESTIMATE	•	•	44 0	*	0.0		*	. 8 . 3	4.01
CARRIER	S SID EXX	• ‹) c	, co	5.2	0.0	0.0	4.	74.7	•
	ROW %	9 0		0	0.1	0.0		0.5		T .0
	COLUMN %	> >	;	•						

TABLE 2 - 26 PRIMARY USE VS. HIERARCHICAL CAPABILITY GROUPS

PAGE 2 OF 2	6 7 8 TOTALS	279 3841	33.6	4 2 57 R		30.4 0.8 5.0 2.5	9.0 5.0 5.0	704 1964	704 1964 25.7 11.7	704 1964 25.7 11.7	704 1864 25.7 11.7 10.6 29.7 2.4 2.6	0.9 5.0 704 1964 25.7 11.7 10.6 29.7 2.4 2.6 1516 2709	704 1964 25.7 11.7 10.6 29.7 2.4 2.6 15.16 2709	10.8 704 1964 25.7 11.7 10.6 29.7 2.4 2.6 1516 2709 3 16.6 11.7	704 1964 25.7 11.7 10.6 29.7 2.4 2.6 15.6 2709 3 4.4 7.8	15.6 15.6 15.6 15.6 15.6 15.6 15.6 15.6 15.6 15.6 16.6 11.7 4.4 7.8 5.1 3.5	15.6 15.6 15.6 15.6 15.6 15.6 15.6 15.6 16.6 11.7 4.4 7.8 5.1 3.5 3.5 3.6 3.5
	r.			0.4													
	4	472	26.2	7.1	0.7		1078	1078	1078 19.6	1078 19.6 16.3	1078 19.6 16.3 1.7	1078 19.6 16.3 1.7 4943	1078 19.6 16.3 1.7 4943	2.41 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.0	1078 1996 166.3 16.3 17.7 14.2 7.7	1078 19.06 16.0 16.0 17.7 14.2 14.2 14.2 14.2 14.2 14.2	1078 19.6 16.3 1.7 1.7 9.43 9.43 1.7.7 2.1
1987	ო	272	45.3	4.4	9 .0		363	363	363 26.0	363 26.0 5.5	363 26.0 5.5	363 26.0 5.5 1.0 6299	363 26.0 5.5 1.0 6299 7.8	363 26.0 5.5 1.0 6299 7.8	363 26.0 5.5 1.0 7.8 7.8 17.8	363 26.0 5.5 1.0 7.8 17.8 35.368	363 26.0 5.5 1.0 7.8 18.1 17.8 35368 3.0
	8	1172	18.1	17.6	5.9 .9		1409	1409	1409	1409 18.0 21.3	1409 18.0 21.3 7.1	1409 18.0 21.3 7.1	1409 18.0 21.3 7.1 3270 10.6	1409 18.0 21.3 7.1 7.1 10.6 9.4	1409 18.0 21.3 7.1 7.1 10.6 9.4	1409 18.0 21.3 7.1 7.1 10.6 9.4 16.4	1409 18.0 21.3 7.1 7.1 10.6 9.4 16.4 19970 3.9
	-	88	*	ლ.	0.5		829	829	829 22.3	829 22.3 12.5	22.3 12.5 2.5	829 22.3 12.5 2.2 15620	829 22.3 12.5 5.2 7.6 4.4	22.3 22.3 2.5 2.5 2.4 4.4 9.9	829 22.3 12.5 2.2 2.2 4.4 4.4 4.4 6.5 0.1	829 12.3 12.5 13.5 13.5 14.4 1.4 1.0 1.0 1.0	829 12.3 12.5 15620 4.4 4.9 4.9 1.0 2.2
		ESTIMATE	% STD ERR	ROW %	COLUMN %		ESTIMATE	ESTIMATE	ESTIMATE STD ERR	ESTIMATE % STD ERR ROW %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN % ESTIMATE	ESTIMATE % STD ERR ROW % COLUMN % ESTIMATE % STD ERR	ESTIMATE % STD ERR ROW % COLUMN % ESTIMATE % STD ERR ROW %	ESTIMATE % STD ERR ROW % COLUMN % ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN % ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN % STD ERR COLUMN % COLUMN % STIMATE % STD ERR
		AIR TAXI					OTHER USES	OTHER USES	OTHER USES	OTHER USES	OTHER USES	OTHER USES	OTHER USES	OTHER USES INACTIVE	OTHER USES	OTHER USES INACTIVE TOTALS	OTHER USES INACTIVE TOTALS

- 4 M 4 M 10 F 10

- ND REGULATORY AVIUNALS
- TWO-WAY COMMUNICATIONS
- TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; VOR OR ADF OR RNAV
- TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER; VOR OR KNAV
5 - 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
6 - TWO-WAY COMMUNICATIONS; A096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT, VOR
7 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV
8 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV

TABLE 2 - 27 HOURS FLOWN VS. HIERARCHICAL CAPABILITY GROUPS

TABLE 2 - 27 HOURS FLOWN VS. HIERARCHICAL CAPABILITY GROUPS

PAGE 2 OF 2	TOTALS	0 4271							5.7	34817				5 267400	-	_
	œ	1910	13.	44	8	626	<u>.</u>	40.	8	2709	=	7.	e e	7691	4.4	28.
	7	379	36.3	69. 80	L .	1922	19.1	12.5	.	1516	16.6	4.4	ro T	29883	3.6	11.2
	ω	7.1	*	1.7	4.2	319	33.7	2.1	18.7	254	43.8	0.7	14.9	1709	14.6	9.0
	ភេ	0	0.0	0.0	0.0	43	*	e.0	5.0	206	47.3	9.0	24.2	852	22.3	0.3
	4	1084	21.3	25.4	1.7	3024	12.4	19.7	4.7	4943	9.5	14.2	7.7	64426	2.1	24.1
1987	ო	45	*	- -	0.1	1263	19.5	8.2	9 9 9	6299	7.8	18.1	17.8	35368	9 9	13.2
	61	254	34.6	න ග	1.3	1506	15.8	æ. 6	7.5	3270	10.6	4.6	16.4	19970	ත. ෆ	7.5
	-	528	31.0	12.4	4.1	971	20.1	6.3	2.5	15620	4.4	44.9	41.0	38107	2.2	14.3
		ESTIMATE	% STD ERR	RO¥ %	CDLUMN %	ESTIMATE	% STD ERR	ROW %	COFFINIA %	ESTIMATE	% STD ERR	ROW %	COLUMN %	ESTIMATE	% STD ERR	ROW %
		400 - 449 HOURS				450+ HOURS				INACTIVE				TOTALS		

CAPABILITY GROUPS KEY HIERARCHICAL

NO REGULATORY AVIONICS - 00 4 M @ C @

, TWO SYSTEMS: AIR TAXIS; VOR OR ADF OR RNAV
, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER; VOR OR RNAV
ALTITUDE ENCODING EQUIPMENT
: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
; TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR
; TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV - TWO-WAY COMMUNICATIONS - TWO-WAY COMMUNICATIONS, TI - TWO-WAY COMMUNICATIONS, TI - 4096 CODE TRANSPONDER, AL - TWO-WAY COMMUNICATIONS: 4 - TWO-WAY COMMUNICATIONS, TI - TWO-WAY COMMUNICATIONS, TI 1 1 1 1 1 1 1

* - % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 28 AGE OF AIRCRAFT VS. HIERARCHICAL CAPABILITY GROUPS

				1987					PAGE	1E 1 OF 2
		-	8	ო	4	ហ	œ	7	œ	TOTALS
O - 4 YEARS	ESTIMATE % STD ERR ROW % CCLUMN %	5276 8.8 17.5 13.8	5006 9.1 16.6 25.1	2825 13.2 9.4 8.0	22.1 1.8 4.8 4.8 2.0	172 * 0.6 20.2	542 25.3 1.8 31.7	2513 13.6 8.3 8.4	11331 5.1 37.5 14.7	30196 3.1 11.3
5 - 9 YEARS	ESTIMATE % STD ERR ROW % COLUMN %	3923 9.8 10.5 5.0	2899 11. 6.3 7.3	3498 12.1 7.6 9.9	8416 7.0 18.2	191 43.3 0.4 22.4	221 40.6 0.5 12.9	5022 9.7 10.9 16.8	21969 3.7 47.6 28.6	46139 2.6 17.3
10 - 14 YEARS	ESTIMATE % STD ERR ROW % COLUMN %	5117 8.7 10.2 13.4	24	3683 10.9 7.3 10.4	14596 5.3 29.1 22.7	133 0 3 15.6	398 31.9 23.3	6435 8 . 4 12 . 8	17411 4.5 34.7 22.6	50241 2.6 18.8
15 - 19 YEARS	ESTIMATE % STD ERR ROW % COLUMN %	2534 12.8 7.9 6.6	2107 13.1 6.6 10.6	3840 10.9 12.0	99923 6.53 4.0 4.0	8 0 6 . 4 8 7 .	3.0	3583 11.2 11.2	98 8 6 6 8 . 2 8 . 2 . 8	31969 3.4 12.0
20 - 24 YEARS	ESTIMATE % STD ERR ROW % COLUMN %	2189 13.9 5.9 5.7	1371 16.6 3.7 6.9	5536 9.1 14.9 15.7	12671 5.9 34.1 19.7	137 * 0.4	183 45.2 0.5	5295 9.3 14.2 17.7	9785 6.0 26.3 12.7	37168 3.1 13.9
25 - 29 YEARS	ESTIMATE % STD ERR ROW % COLUMN %	1337 17.0 6.4 3.5	874 20.1 4.2 4.4	3859 10 . 5 17 . 5	7737 7.4 37.0 12.0	0 0 C 0 * 4 0	136 0.7 8.0	2933 12.2 14.0 9.8	4 120 00 . 3 7 . 01 7 . 7	20889 4.0 7.8
30 - 34 YEARS	ESTIMATE % STD ERR ROW % COLUMN %	1120 19.6 8.6 2.9	852 22.9 6.6 3.0	3308 11.7 25.5 9.4	4070 10.3 31.4 6.3	2 5 2.2 * 3.0	4 0 + 30 - 8 3	2064 14.7 15.9 6.9	15.8 11.4 1.1	12954 4.9 4.8

TABLE 2 - 28 AGE OF AIRCRAFT VS. HIERARCHICAL CAPABILITY GROUPS

				1987					PAC	PAGE 2 OF 2
		-	8	м	4	ហ	ဖ	7	∞	TOTALS
35+ YEARS	ESTIMATE % STD ERR	16173	4666 8.2	9014	4667 7.5	28 * 1.0	139 45.7 0.4	2027 12.5 5.4	937 16.1 2.5	37651 1.5
	COLUMN %	42.0 4.4	23.4	25.5	7.2		8.1	8 .	1.2	14.1
TOTALS	ESTIMATE % STD ERR ROW %	38107 2.2 14.3	19970 3.9 7.5	35368 3.0 13.2	64426 2.1 24.1	852 22.3 0.3	1709 14.6 0.6	29883 3.6 11.2	76915 1.4 28.8	267400
			HIERARCHIC	AL CAPABIL	HIERARCHICAL CAPABILITY GROUPS KEY	Έν				

1 - NO REGULATORY AVIONICS
2 - TWO-WAY COMMUNICATIONS
3 - TWO-WAY COMMUNICATIONS, TI
4 - TWO-WAY COMMUNICATIONS, TI
5 - 4096 CDDE TRANSPONDER, AL
6 - TWO-WAY COMMUNICATIONS: 4
7 - TWO-WAY COMMUNICATIONS; TI
8 - TWO-WAY COMMUNICATIONS; TI

, TWO SYSTEMS: AIR TAXIS; VOR OR ADF OR RNAV
, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER; VOR OR RNAV
, ALTITUDE ENCODING EQUIPMENT
: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
: TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV
; TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV
; TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV

- % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 29 COMPUTED AIRCRAFT TYPE VS. HIERARCHICAL CAPABILITY GROUPS

PAGE 1 OF 2	TOTALS	87787 0.0 32.8	121486 0.0 45.4	181 196 0.0 8.	9138 0.0 3.4	264 0.0 1.0	4775 0.0 1.8	80 0 80 0 80 0	250 0.0 0.1
Ā	60	1279 18.4 1.5	43668 2.3 35.9	13548 2.5 74.4 17.6	75885 20.00 80.00 90.00	44 16.7 1.0	80 + 80 8 8 1	781 92.9 1.0	15.4 15.4 56.4 0.2
	_	572 8.8 8.6 9.4	20880 4.3 17.2 69.9	25.0 2.0 2.0 2.0 2.0 2.0	421 23.1 4.6	48 35.1 18.6 0.2	56 1.2 * 0	86 8.00 8.14.5	0 0 0 0 0 0 0 0
	σ	288 80.00 80.00 7.7.7	28.5 0.5 3.8 8.6	42.9 1.0 1.0	139 39.7 1.5	00	12 * 0 .7	00 7 * # #	0.0
	ហ	131 4.00.4 4.00.4	41 8 . 0 8 . 0 8 . 0	163 6.0 19.1	20 04 10 4 08 10 4 08	00	0+ 0+99	000	0000
	•	19719 3.7 22.5 30.8	40718 2.7 33.5 63.2	0.00 0.00 0.00 0.00 0.00	22.2 6.6 8.0 8.0	6. 8. 1. 0 6. 3. 1. 0	33 7 + 5 . 1	<u>+ + 0</u>	0 0 0 + 80 0
1987	ო	22472 3.7 25.6 63.5	1053 5.8 1.8	29.7 20.7 20.3 1.2	0 + 1 . 0 3 + 1 .	0000	00.7 .1.3	000	0 88 ± 20 ± 20 ± 20 ± 20 ± 20 ± 20 ± 20
	8	10112 6.2 11.5 50.8	1791 14.0 1.5 9.0	43.7 60.3 0.3	4 8 L 7.	25 8	00 . . sr + d.	000	
	-	28007 2.6 31.9 73.5	2385 11.7 2.0 6.3	287 24.9 1.6 0.8	249 27.0 2.7 0.7	102 33.1 38.6 0.3	0000	0000	68 25.6 27.2 0.2
		ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR Row % Column %	ESTIMATE % STD ERR Row % Column %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %
		FIXED WING - PISTON: SINGLE ENGINE 1-3 SEATS	SINGLE ENGINE 4+ SEATS	TWO ENGINES 1-6 SEATS	TWD ENGINES 7+ SEATS	OTHER	FIXED WING - TURBOPROP: 2 ENGINES 1-12 SEATS	2 ENGINES 13+ SEATS	OTHER

TABLE 2 - 29 COMPUTED AIRCRAFT TYPE VS. HIERARCHICAL CAPABILITY GROUPS

1 2 3 4 5 6 7 8 TOTALS 2 36 126 0 0 109 3883 4128 48 11 12 17 0 0 0 0 0 48.2 48 11 12 17 0 0 0 0 0 48.2 48 11 12 17 0 0 0 0 0 0 48.2 48 11 12 17 0 0 0 0 0 0 0 5 1 2 1 1 1 1 1 1 1 1
0.0 2 126 0 0 48.2 1.8 0.0 0.0 0.0 2.6 94.1 94.1 0.0 0.0 0.0 2.6 0.0 2.6 94.1 0.0 0.0 0.0 0.0 2.6 94.1 94.1 94.1 1.7 1.8 4.14 0.0 2.8.3 2.9.3 3.0 3.0 3.0 2081 4.25 2.2 2.6 0.0 0.0 0.1 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.0 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1
11 12 17 0.0 0.0 0.4 5.0 0.0 0.4 5.0 0.0 0.0 0.4 5.0 0.0 0.0 0.0 0.4 5.0 0.0 0.0 0.0 0.4 5.0 0.0 0.0 0.0 0.4 5.0 0.0 0.0 0.0 0.0 0.4 5.0 0.1 0.0 0.1 0.0 0.0 0.0 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.0
11 12 17 0.0 0.0 0.0 0.4 5.0 0.4 5.0 0.0 0.4 5.0 0.1 1.1 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1
11 12 17 0 34 33 509 1.7 1.8 2.6 0.0 28.3 29.3 3.0 1.7 1.8 2.6 0.0 2.0 76.8 0.1 0.0 0.0 2.0 7.6 2081 425 33.2 22 20.7 185 57 7.7 20.2 24.1 * 226 87.7 30.3 * 10.4 1.2 0.5 2.6 12.1 0.6 0.1 10.4 1.2 0.5 2.6 12.1 0.6 0.1 14.4 33.2 19.5 0.0 42.0 23.7 14.7 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 4414 435 39 85 43 81 17 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.1 10.0 2.5 0.3 0.0 22.1 1.2 0.1 10.0 2.5 0.3 0.0 3.9 3.9
1.7 1.8 41.4 0.0 28.3 29.3 3.0 1.7 1.8 2.6 0.0 2.0 7.0 7.0 2081 425 332 22 207 185 57 7.7 20.2 24.1 * 28.7 30.3 * 37.8 7.7 6.0 0.4 3.8 3.4 1.0 10.4 1.2 0.5 2.6 12.1 0.6 0.1 10.4 33.2 19.5 0.0 42.0 23.7 14.7 14.4 33.2 19.5 0.0 42.0 23.7 14.7 4414 435 39 85 43 81 17 45.8 26.7 4 0.0 13.2 2.2 1.0 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.1 10.0 2.5 0.3 0.0 22.1 1.2 0.0 0.3 0.0 0.0 22.1 1.2 0.0 0.0 0.0 0.0 22.1 1.1 0.0 0.0 0.0 0.0 22.1 1.2 0.0 <t< td=""></t<>
1.7 1.8 2.6 0.0 5.1 5.0 76.8 0.1 0.0 0.0 2.0 0.1 0.7 2081 425 332 22 207 185 57 7.7 20.2 24.1 * 28.7 30.3 * 37.8 7.7 6.0 0.4 3.8 3.4 1.0 10.4 1.2 0.5 2.6 12.1 0.6 0.1 13.42 401 880 0 226 671 7.99 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 4414 435 3.9 85 43 81 1.7 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.1 10.0 2.5 0.3 0.0 22.1 1.2 0.0 2.5 0.3 0.0 3.9 24.1 0.2 0.3 0.6 0.3 45.4 81 0.1
2081 425 332 22 207 185 57 7.7 20.2 24.1 * 28.7 30.3 * 1.0 37.8 7.7 6.0 0.4 3.8 3.4 1.0 10.4 1.2 0.5 2.6 12.1 0.6 0.1 1342 401 880 0 226 671 799 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 5.1 17.9 6.7 1.1 1.4 0.0 5.1 17.9 4414 435 39 85 43 81 17 45.8 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 3568 64426 852 1709 2883 76915 28.8 3.5 2.2 1.2 22.3 14.6 11.4 14.4 3.5 2.2 1.0 11.2 11.4 11.4 3.5
2081 425 332 22 207 185 57 7.7 20.2 24.1 * 28.7 30.3 * 1.0 37.8 7.7 6.0 0.4 3.8 3.4 1.0 10.4 1.2 0.5 2.6 12.1 0.6 0.1 13.42 401 880 0.0 42.0 23.7 14.7 30.1 9.0 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 6.7 1.1 1.4 0.0 13.2 2.2 1.0 4414 435 3.9 85 43 81 17.9 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 3.9 3.9 2.1 22.3 1709 2.88 1.4 7.5 1.3 2.1 22.3 1709 2.88 1.4 19970 3.3 2.1 0.3 0.0 0.3 0.0 </td
7.7 20.2 24.1 * 28.7 30.3 * 37.8 7.7 6.0 0.4 3.8 3.4 1.0 10.4 1.2 0.5 2.6 12.1 0.6 0.1 13.42 401 880 0 226 671 799 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 30.1 1.1 1.4 0.0 5.1 15.1 17.9 4414 435 39 85 43 81 17 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.4 0.9 0.4 0.8 0.0 22.1 1.2 0.0 2.5 0.3 0.0 19970 35368 64426 852 1709 28.8 1.4 7.5 13.2 24.1 0.3 0.6 1.4 16.6 11.2 0.3
37.8 7.7 6.0 0.4 3.8 3.4 1.0 10.4 1.2 0.5 2.6 12.1 0.6 0.1 13.42 401 880 0 226 671 799 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 4414 435 39 85 43 81 17.9 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35.56 64426 852 1709 29883 76915 28.8 7.5 13.2 24.1 0.3 0.6 11.4 7.5 13.2 24.1 0.3 0.6 1.4
10.4 1.2 0.5 2.6 12.1 0.6 0.1 1342 401 880 0 226 671 799 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 5.1 15.1 17.9 4414 435 39 85 43 81 17 45.4 4.5 0.4 0.9 0.4 0.8 0.2 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 28.8 7.5 13.2 24.1 0.3 0.6 11.2 28.8
1342 401 880 0 226 671 799 14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 42.0 23.7 14.7 6.7 1.1 1.4 0.0 6.7 17.9 4414 435 39 85 43 81 17 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 28.8 7 5 13.2 24.1 0.3 0.6 11.2 28.8
14.4 33.2 19.5 0.0 42.0 23.7 14.7 30.1 9.0 19.7 0.0 5.1 15.1 17.9 6.7 1.1 1.4 0.0 5.1 15.1 17.9 4414 435 39 85 43 81 17 5.8 26.7 * * * * * * 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 28.8 75 13.2 24.1 0.3 0.6 11.2 28.8
30.1 9.0 19.7 0.0 5.1 15.1 17.9 6.7 1.1 1.4 0.0 13.2 2.2 1.0 4414 435 39 85 43 81 17 5.8 26.7 * * * * * * 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 26 75 13.2 24.1 0.3 0.6 11.2 28.8
6.7 1.1 1.4 0.0 13.2 2.2 1.0 4414 435 39 85 43 81 17 5.8 26.7 * * * * * 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 26 7.5 13.2 24.1 0.3 0.6 11.2 28.8
4414 435 39 85 43 81 17 5.8 26.7 * * * * * 45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 26 7.5 13.2 24.1 0.3 0.6 11.2 28.8
5.8 26.7 * <td< td=""></td<>
45.4 4.5 0.4 0.9 0.4 0.8 0.2 22.1 1.2 0.1 10.0 2.5 0.3 0.0 19970 35368 64426 852 1709 29883 76915 26 3.6 1.3 28.8 75 13.9 24.1 0.3 0.6 11.2 28.8
22.1 1.2 0.1 10.0 2.5 0.3 0.0 1.0 19970 35368 64426 852 1709 29883 76915 26 3.6 1.4 3.0 2.1 22.3 14.6 3.6 11.2 28.8
19970 35368 64426 852 1709 29883 76915 3 3.9 3.0 2.1 22.3 14.6 3.6 1.4 7.5 13.2 24.1 0.3 0.6 11.2 28.8
3.9 3.0 2.1 22.3 14.6 3.6 1.4 7.5 13.9 24.1 0.3 0.6 11.2 28.8
7 55 13 2 24 1 0 3 0 6 11 2

HIERARCHICAL CAPABILITY GROUPS KEY

1 - NO REGULATORY AVIONICS
2 - TWO-WAY COMMUNICATIONS
3 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; VOR OR ADF OR RNAV
4 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER; VOR OR RNAV
5 - 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
6 - TWO-WAY COMMUNICATIONS: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT, VOR
7 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV
8 - TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV

* - % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 30 BASE AIRPORT REGION VS. HIERARCHICAL CAPABILITY GROUPS

		1000		1987					PAG	PAGE 1 OF 2
		-	8	m	4	ហ	ø	7	60	TOTALS
									,	
	BYANTTOR	635	1463	4176	2246	0	42	228	481	8271
ALASKAN	TET ICE	20.00	17.6	S.	13.2	0.0	*	38.	28.1	-
	A 20 20 20 20 20 20 20 20 20 20 20 20 20	, «	, r.	45.0	24.2	0.0	S	20	2.5	•
	COLUMN %		7.3	11.8	3.5 5.	0.0	64 10	8 .0		n
										1
	REALTER	3766	925	2418	3566	34	52	1139	4576	16477
CENTRAL	S STATE	7 2 2	20.4	13.7	11.6	*	*	21.1	ָ פֿי	- n
	XX 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	. 60	0	14.7	21.6	0.5	e.0	න . ග	27.8	•
	COLUMN %	9 69 9 69	4		ب ت	4 .0	o. w	ლ ლ	a N	7.0
		,		4	000	4.0	132	4336	9567	28802
FASTERN	ESTIMATE	4201	1618	4700	2670	5	;	5	ď	3.8
	% STD ERR	ල ග	15.5 3.5	- - -	œ ;	* (• •	2 <u>4</u>		
	% NO 0	14.1	10 4	12.1	21.1	7.0	. .	3 L		•
	COLUMN %	11.0	8.1	10.2	ω	7.5	7.7	•	† . <u>7 -</u>	<u>.</u>
			,		6	ţ	146	3344	13419	47577
GREAT LAKES	ESTIMATE	8473	2654	1017	5/77	è'	Α	×	5	8.8
-1	% STD ERR	æ. 9	12.5	20	ה ס נ	• •	, c		28.2	
	ROW %	17.8	O	- 14 - 9	72.0	* () (. ;	47.4	47.8
_	COLUMN %	22.2	13.3	20.1	9 .0	6 6 9	e O	7.11	•	• •
			ţ	, 100 t	2363	83	Ξ	1739	3124	10841
NEW ENGLAND	ESTIMATE	1038	24.0	. 4 4	14.2	*	*	16.8	11.7	ლ ლ
	S S I D ERR	<u> </u>	, r	14.7	21.8	89.0	0	16.0	28 . 8	,
	COLUMN %	9.6	4.0	4. RU	3.7	හ ග	æ v	ιυ œ	+	4
	!	•	i c	00.00	8 23 4	4	127	3531	6918	30589
NORTHWEST	ESTIMATE	4598	2027	, c) «	: *	*	₩.	0	3.7
MOUNTAIN	% STD ERR	ָ קיי	4. 6	5 <u>5</u> 5	9 6	0.2	8.0	10.2	28.0	
	ROW			- œ	13.8	27.4	8. 8.	12.9	13.3	12.0
	COLUMN %	9 · 0) <u>†</u>	2) }					
		9	7	4603	10818	182	299	7858	14792	47802
SOUTHERN	ESTIMATE	4870	4 d) (6	46.0	29.1	7.7	o.	2.7
	% STO ERR	л .) c) (C)	22.6	4.0	9.0	16.4	30.8	!
	KOW S	- 6	22.2	13.0	16.8	21.4	17.5	26.3	19.2	17. x
) •	! !							

TABLE 2 - 30
BASE AIRPORT REGION VS. HIERARCHICAL CAPABILITY GROUPS

				1987					PAGE	E 2 OF 2
		-	8	м	•	ហ	6	7	co	TOTALS
SOUTHWESTERN	ESTIMATE	5609	2798	3602	7010	89 * 69	396	2992	11022	33527
	ROW % COLUMN %	16.8 16.7		13.55	29.9 16.5	21.0	12.9	11.3	37.1	15.6
WESTERN-PACIFIC	ESTIMATE % STO ERR	4282 9.5	2921	3973 10.9	4.09 4.6		373	5026 9.8	13554 5.1	41362 3.0
	COLUMN %		14.6	# 1	17.2	. 6 . 6 . 6	21.8	16.8	17.6	15. 3.
TOTALS	ESTIMATE % STD ERR ROW %	38107 2.2 14.3	19970 3.9 12.7	35368 3.0 13.2	64426 2.1 24.1	852 22.3 0.3	1709 14.6 0.6	29883 3.6 11.2	76915 1.4 28.8	267400

REGULATORY AVIONICS

- TWO-WAY COMMUNICATIONS
- TWO-WAY COMMUNICATIONS
- TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; VOR DR ADF OR RNAV
- TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; VOR DR TRANSPONDER; VOR OR RNAV
- 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT
- TWO-WAY COMMUNICATIONS: 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT, VOR
- TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV
- TWO-WAY COMMUNICATIONS, TWO SYSTEMS: AIR TAXIS; 4096 CODE TRANSPONDER, ALTITUDE ENCODING EQUIPMENT; VOR AND DME OR RNAV

* - % STANDARD ERROR GREATER THAN 50%

ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED. NOTE:

TABLE 2 - 31 PRIMARY USE VS. NON-HIERARCHICAL CAPABILITY GROUPS

1 OF 2	ALL	12512 3.8 4.7	41832 2.6 15.6	133533 1.0 48.8	16273 4.9 6.1	7260 3.5 2.7	5364 8 . 5 2 . 0	1812	15.4
PAGE	GROUP	36. 2.5 2.5 0.3	4686 9.2 11.2 4.2	58674 1.9 4.3.9 52.5	7455 7.3 45.8 6.7	6752 3.2 93.0 6.0	2427 12.4 45.2 2.2	442 46.87 4.39.60	± * 0.0
	LRN, ML	96 0.8 11.3	42.3 1.0 1.0 8.6	45.0 0.1 1.0 1.0	000	000	3.0 8.0 7.	000	000
	L, MB, GS, ML	139 38.8 1.1	45.93.3.4.3.4.9.9.9.3.4.9.9.9.9.9.9.9.9.9.	43.5 6.2 6.2 19.1	0.4 2.4 4.0	0000	80 4 - 7 - 7 - 3	0000	2.5 8.8 8.8
	¥	38.0 1.3 7.9	946 28.1 1.5 32.1	555 26.9 0.4 27.6	30 5.2 ± 30	00 0 * ± 6.	2. ± 2. ± 5. 6.	0000	2 * * . 7.
	RA	88 8. 8. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	5162 8.1 12.3 24.4	2851 12.1 2.1 13.5	2.0 0.0 8.0 8.0	0.0 + 2.	272 32.1 5.1 1.3	0 + 8 × 3	24.0 24.0 3.0 3.0 3.0
	LRN	7375 4.8 58.9 11.9	15655 4.8 37.4 25.3	29124 3.7 21.8 47.0	1131 20.1 7.0 1.8	32.0 5.7 7.0	1763 15.0 32.9 2.8	126 7.0 0.2	259 27.1 23.5 0.4
1987	L,MB, GS,RA	8322 3.8 66.5 42.0	4914 8.3 11.7 24.8	2497 12.8 1.9 12.6	4 6 0 8 8 8 8	0.0 0 * ± 0.	261 4.9 4.9	30 + 7 + 0 . 2	29.2 39.9 2.2
	L,MB, GS	3244 10.9 25.9 3.3	27835 3.4 66.5 28.5	48881 2.5 36.6 50.1	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	204 25.7 2.8 0.2	1421 17.6 26.5 1.5	64 8 * t . 0	22 44 44 44 44 44 44 44 44 44 44 44 44 4
	L, MB	155 42.8 1.2 1.7	1908 15.1 4.6 21.1	8 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	28.00 4.00 7.00 7.00 7.00	0000	178 3.3 2.0	0 3 KB 0 7 KB	2. * * . 0.3 * *
	_	252 42.6 2.0 1.6	727 3.8. 1.0. 1.0.	10053 6.6 7.5	2040 15.4 12.5 9.9	0 ° 5 * 8 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	822 25.9 11.6 3.9	0 5 4 0 0 6 8 4 0	4 * C.O.
		ESTIMATE % STD ERR RDW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %
		EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL Applications	AERIAL Observation	OTHER WORK USE	COMMUTER AIR CARRIER

TABLE 2 - 31 PRIMARY USE VS. NON-HIERARCHICAL CAPABILITY GROUPS

					1987						PAGE	2 OF 2
		اد	L, MB	L, MB, GS	L, MB, GS, RA	LRN	RA A	¥	L, MB, GS, ML	LRN, ML	GROUP	ALL
AIR TAXI	ESTIMATE % STD ERR ROW % COLUMN %	157 4 . 2 1 . 0	2 - 1 - 4 4 * 0 4	3105 11.0 46.5 3.2	1713 13.6 25.7 8.6	2496 11.6 37.4 4.0	1852 12.8 27.8 8.7	2 + 2	170 * 2.5 13.7	4	521 27.0 7.8 0.5	6673 7.0 2.5
OTHER USES	ESTIMATE % STD ERR ROW % COLUMN %	281 4.2 1.8	.66 * * 66	1591 15.4 24.0 1.6	1050 13.7 15.9 5.3	2020 13.4 30.5	1143 13.7 17.3 5.4	102 48.0 1.5 5.1	4 0.4 0.4 0.4	9. ± 2. ± 9.	3067 11.1 46.4 2.7	6617 7.3 2.5
INACTIVE	ESTIMATE % STD ERR ROW % COLUMN %	20.7 20.7 8.9 8.3	802 21.5 2.3 8.9	2074 2075 2074 2076 2076 2076 2076 2076 2076 2076 2076	538 25.8 1.55	2013 14.4 3.2	867 23.2 1.9 3.1	233 41.2 0.7	0.00 	37 * 0.1 4.4	26824 3.3 77.0 24.0	34817 3.0 13.0
TOTALS	ESTIMATE % STD ERR ROW %	15853 5. 1 5. 9	9031 8.8 4.	97619 1.3 36.5	19820 2.9 7.4	61981 2.1 23.2	21177 2.8 7.9	2010 13.8 0.8	1240 17.9 0.5	846 19.7 0.3	111835 1.1 41.8	267400

		OMEGA				
	;	LORAN-C,				
		INCLUDES				
		LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA		MICROWAVE LANDING SYSTEM	œ	AVIONICS
SLOPE	LOCALIZER	RANGE NAV	IR BEACON	WAVE LAND	ALTIMETE	NO REGULATORY AVIONICS
GLIDE	LOCAL	LONG	MARKE	MICRO	RADAR	2
ſ	ſ	f	•	1	1	ľ
gs	_	Z	¥	¥	R A	2

* - % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 32 HOURS FLOWN VS. NON-HIERARCHICAL CAPABILITY GROUPS

1 OF 2	ALL	60007 2.3	22.4	594 03 2.4	22.2	41972 3.0	15.7	4.8	8 9	14718 5.2 8.3	7750 7.2 2.8	7555 7.3 2.8	3690 10.3 1.4
PAGE	GROUP	36032 3.0 60.0	32.2	20767	35.0 18.8	11248	26.8 10.1	3310 11.6	0	2891 11.9 19.6	1719 15.8 22.2 1.5	28.4 26.9 4.9 4.8	1027 21.1 27.8 0.9
	LRN, ML	107 38.6	12.6	157	6.3 6.3 6.3	1 *	6. 4	78 0	4	0 + 2 + - 4	0°.1 1.2 1.2	£ * 4.0	83 1.55 1.00
	L, MB, GS, ML	50 * 1.0	4.0	295 39.1	23.5	123	ო თ O თ	2. 83. 80. * a	12.7	- 0 e e + 8 . e	ტ 4 * მ რ	. 6 . 4 . 6 . 7 . 7	60 * 0 80 60 * 0 80
	#	373 31.2 0.6	18. 6.	359 35.4	0.6 17.9	167 45.1	⊙ & ∀ . Ø	250 41.2	4.2	137 * 0.9 8.8	0.0 4 * 0.0		60 + 0 4.
	A A	1646 13.9 2.7	7.8	1823	ლ ფ ⊢. მ ე	2905 10.6	6.9 7.7	2145 12.3	0.7	2672 10.9 18.2 12.6	1494 13.9 19.3	1848 12.1 24.5	913 15.7 24.7 4.3
	LRN	8290 7.3 13.8	13.4	15550 5.2	26.2 25.1	12702 5.6	20.3 0.5 5	6054 8.1	. ao 	28 4 8 8 8 5 4 5 5 8 5 8 5 8 5 8 5 8 5 8	2322 12.3 30.0 3.7	2526 11.8 33.4 4.1	1184 16.4 32.1
1987	L,MB, GS,RA	1327 15.1 2.2	6.7	1641	6, 80 80 60	2825 10.8	6.4 14.3	2078 12.6	5.0	2587 11.0 17.6 13.1	1467 18.9 18.9	1809 12.3 23.9 9.1	908 15.7 24.6 4.6
	L,MB, GS	13932 5.5 23.2	14.3	25887 3.8	43.6 26.5	21706	51.7 22.2	99.78 6.5	10.2	7750 7.5 52.7 7.9	3882 10.6 50.1	2750 12.8 36.4 2.8	499 40.6 6.0 7.1
	L, MB	2108 14.6 3.5	23.3	2707	30.0 30.0	1455 17.5	3.5 4.5	437 34.5	i 4.	33.4 4.5.4 5.5	183 2 . 2 2 . 4 2 . 0	2. + + + + + + + + + + + + + + + + + + +	4 + C. O. Ri.
	_	3627 10.8 6.0	22.9	4434	7.5 28.0	2716 13.1	6.5	942 22.6	. w	28.98 4.0 3.7	393 36.5 5.1	592 28.0 7.8 3.7	9 9 9 9 9 9 9
		ESTIMATE % STD ERR ROW %	COLUMN %	ESTIMATE % STD ERR	ROW % COLUMN %	ESTIMATE % STD ERR	ROW %	ESTIMATE % STD ERR	COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %
		49 HOURS		99 HOURS		149 HOURS		- 199 HOURS		200 - 249 HOURS	299 HOURS	349 HOURS	350 - 399 HOURS
		+		50		- 001		150 -		200	250 -	300	350 -

TABLE 2 - 32 HOURS FLOWN VS. NON-HIERARCHICAL CAPABILITY GROUPS

					1987						PAGE	2 0F 2
			L, MB	L,MB, GS	L, MB, GS, RA	LRN	R	볼	L, MB, GS, ML	LRN, ML	NO GROUP	ALL
400 - 449 HOURS	ESTIMATE % STD ERR	254 47.9	174	1278	1087	1372	1090	126	126	о 4 *	1308 18 9	4271
	ROW % COLUMN %	N –	4 - - 0.	29.9 1.3	2 8 8 8 8	32.1	25.55 55.55	. 0 e.	3.0	11.1	30.6	9.
450+ HOURS	ESTIMATE % STD ERR ROW %	1229 19.6 8.0	30.0 3.4.0	4118 10.2 26.9	3603 7.4 23.5	4783 7.7 31.2	3981 7.1 26.0	212 37.4 1.4	123 0.8	2. 1. 4. 6. 1. 1. 0. 1.	4698 9.5	15316
	COLLIMAN %	8	n L	4.	18.2	7.7	æ æ	5 5	ග. ග	18.7	4.2	10 .7
INACTIVE	ESTIMATE % STD ERR ROW %	1003 20.7 2.9	208 21.5 2.3 2.3 2.9	4795 9.1 13.8	25.38 5.8 2.5.7	20 4.4. 8.6.	23.2 1.9	2.5 2.5 2.7	98 * 7.0	£ * + + + + + + + + + + + + + + + + + +	26824 3.3 77.0	34817
TOTALS	ESTIMATE % STD ERR ROW %	15853 5. 1 5. 8	808 1.80 1.80 1.80	97619 1.3 36.5	19820 2.9 7.4	61981 2.1 23.2	2117 2.8 2.9	2010 13.8 0.8	2. 42. 6 2. 7. 7. 0	4 8 6 7 . O	111835 1.1 1.1 41.8	267400

GLIDE SLOPE	LOCALIZER	LONG RANGE NAVIGATION - INCLUDES LORAN-C.	MARKER BEACON	MICROWAVE LANDING SYSTEM	RADAR ALTIMETER	NO REGULATORY AVIONICS
1	•	•	ı		ı	
SS	_	Z	뿔	로	RA	¥

OMEGA

* - % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 33 AGE OF AIRCRAFT VS. NON-HIERARCHICAL CAPABILITY GROUPS

1 OF 2	ALL CRAFT	30196 3.1 11.3	46139 2.6 17.3	50241 2.6 18.8	31969 3.4 12.0	37168 3.1 13.9	20889 4.0 7.8	12954 4.9 8.4
PAGE	GROUP	12998 5.0 43.0	12761 5.4 27.7	16267 4.8 32.4 14.5	11176 6.0 35.0	12959 5.7 34.9	7972 6.9 38.2 7.1	6850 7.6 52.9 6.1
	LRN, ML	314 27.3 1.0 37.1	13. 4 13. 4	28 84 8. 80	- 0.3 13.4	4. 0. 3 4. 14.	66 + C 6	0000
	L, MB, GS, ML	157 36.9 0.5	294 40.6 0.6 23.7	293 36.0 0.6 23.6	24 20 8.0 8.0 0.0	130 * 0 . 3 10 . 3	4 0 E 6 + 4 ii	0000
	₹	200 27.8 2.1.8 3.6	305 39.3 0.7	461 30.4 0.9 22.9	333 36.6 1.0 16.6	287 35.6 0.8 14.3	8 0 4 * 6. C	0 0 8 * ± 4.
	RA	5081 6.3 16.8 24.0	6257 6.4 13.6 29.5	5070 7.6 10.1 23.9	2148 12.1 6.7 10.1	1767 12.6 4.8 8.3	540 20.7 2.6 2.5	4 * 6.0 2 * 6.2
	LRN	9174 6.0 30.4 14.8	12508 5.4 27.1 20.2	12735 5.6 25.3 20.5	7718 7.3 24.1 12.5	9946 6.4 26.8 16.0	4496 9.4 21.5 7.3	2547 12.9 19.7 4.1
1987	L, MB, GS, RA	4871 6.4 16.1 24.6	5971 6.5 12.9 30.1	4616 7.9 9.2 23.3	1955 12.6 6.1 9.9	16.31 12.8 4.4 8.2	20.6 2.4 2.5	4 * 6.2.
	L, MB, GS	8241 6.9 27.3 8.4	21520 4.1 46.6 22.0	23368 4.0 46.5 23.9	13907 5.4 43.5 14.2	16176 4.8 43.5 16.6	8367 6.7 1.04 8.6	3701 10. 1 28.6 3.8
	L , MB	25.6 2.5 8.5 2.5	981 21.4 2.1 10.9	16.0 16.0 18.2 18.2	1572 17.2 4.9 17.4	17.98 16.2 4.8 19.9	18.8 6.8 6.3 6.3	35.55 3.57 3.00 3.00
		1522 18.6 5.0 8.6	2835 12.9 6.1 17.9	2084 15.2 4.1 13.1	18.7.7 15.7.7 15.8 1.6	2646 13.6 7.1 16.7	1732 16.3 8.3 10.9	1244 19.0 9.6 7.8
		ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %	ESTIMATE % STD ERR ROW % COLUMN %
		0 - 4 YEARS	5 - 9 YEARS	10 - 14 YEARS	15 - 19 YEARS	20 - 24 YEARS	25 - 29 YEARS	30 - 34 YEARS

TABLE 2 - 33 AGE OF AIRCRAFT VS. NON-HIERARCHICAL CAPABILITY GROUPS

ESTIMATE 1971 673 2242 264 3085 307 209 49 45 30740 37651 % STD ERR 12.4 22.0 10.7 40.7 10.3 35.8 41.2 * 10.1 81.6 COLUMN % 12.4 7.5 2.3 1.3 5.0 1.4 10.4 4.0 5.3 27.5 14.1 81.0 82.0 1.4 10.4 4.0 5.3 27.5 14.1 81.0 82.0 1.4 10.4 4.0 5.3 27.5 14.1 81.0 82.0 1.4 10.4 10.4 10.4 10.4 846 111835 267400 ROW % 5.9 3.4 36.5 7.4 23.2 7.9 0.8 0.5 0.5 0.3 41.8						1987						PAGE	2 OF 2
1971 673 2242 264 3085 307 209 49 45 30740 12.4 22.0 10.7 40.7 10.3 35.8 41.2 * * * 1.9 5.2 1.8 6.0 0.7 8.2 0.8 0.6 0.1 0.1 81.6 12.4 7.5 2.3 1.3 5.0 1.4 10.4 4.0 5.3 27.5 15853 9031 97619 19820 61981 21177 2010 1240 846 111835 5.1 6.9 1.3 2.9 2.1 2.8 13.8 17.9 19.7 1.1 5.9 3.4 36.5 7.4 23.2 7.9 0.8 0.5 0.3 41.8			J.	L, XB	L, MB, GS	L.MB. GS,RA	LRN	A A	뒾	L, MB, GS, ML	LRN, ML	GROUP	ALL
15.4 7.5 2.3 1.3 5.0 1.4 10.4 4.0 5.3 27.5 15.4 15.853 9031 97619 19820 61981 21177 2010 1240 846 111835 5.1 5.9 3.4 36.5 7.4 23.2 7.9 0.8 0.5 0.3 41.8	STIN		71	673	2242	264	3085	307	209	4 8	54	30740	37651
12.4 7.5 2.3 1.3 5.0 1.4 10.4 4.0 5.3 27.5 15.5 15.4 10.4 10.4 10.4 10.4 10.5 15.3 27.5 15.5 15.5 15.5 15.5 15.5 15.5 15.5 1	אנ אנ		† 74	- 1.8 - 1.8	2 6	. 6	8 2 8 7	9 89 9 0	9.0	0	0.	. 6	<u>:</u>
15853 9031 97619 19820 61981 21177 2010 1240 846 111835 3 5.1 6.9 1.3 2.9 2.1 2.8 13.8 17.9 19.7 1.1 5.9 3.4 36.5 7.4 23.2 7.9 0.8 0.5 0.3 41.8	3		•	7.5	7	1 .3	50 O	4.	4.01	4 .0	හ ස	27.5	14.1
5.1 6.9 1.3 2.9 2.1 2.8 13.8 17.9 19.7 5.9 3.4 36.5 7.4 23.2 7.9 0.8 0.5 0.3	STIK	_	53	9031	97619	19820	61981	21177	2010	1240	846	111835	267400
	ST 39		- o	0. 6. 0. 4.	36.5 36.5	2. V 9. 4.	23.7 23.2	2, 7, 80, 60,	<u>ය</u> නි.හි.	0. 13 0. 13	0.0 0.0	4.4	

GS - GLIDE SLOPE
L - LOCALIZER
LRN - LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB - MARKER BEACON
ML - MICROWAVE LANDING SYSTEM
RA - RADAR ALTIMETER
NO - NO REGULATORY AVIONICS

* - % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 34 COMPUTED AIRCRAFT TYPE VS. NON-HIERARCHICAL CAPABILITY GROUPS

1 OF 2	ALL CRAFT	87787 0.0	32.8	121486	o 0	45.4	18196	0.0	,	ත ත	9138	0.0	,	₩ ₩.	264	0.0		0 -	4775	0.0		- 80	846	0.0		ю. О	250	o 0	,	.
PAGE	NO GROUP	69184 1.1 78.8	61. 8	25714	4.6	23.0	432	16.3	4.7	.	183	0	4	in O	147	21.7	55.7	. 0	<u>6</u>	*	4 .0	0.0	4	*	0	o. o	78	7.2	31.2	<u>.</u>
	LRN, ML	60 * 0.1	7.1	234	4. c	27.7	161	47.9	6. O	19.0	82	* :	o 1	r. 50	0	0.0	0.0	0.0	4	*	6. O	4. co	76	34.2	O. 6	O 6	0	o 0	0.0	0.0
	L.MB, GS,ML	4 * 0.0	ო ო	503	8 8 8	40.6	311	38.6	1.7	25.1	139	*		11.2	0	o. o	o 0	0.0	4	*	ர О	ເນ ເນ	19	39.0	7.2	4 0.	13	*	5.2	0
	귶	283 38.5 0.3	14.1	723	25.55 50.55	36.0	414	31.7	2.3	5 0. 6	157	*	1.7	7 .88	0	0.0	0.0	0.0	4	*	6 .	2.2	86	31.5	11.6	4 .	18	*	7.2	6. O
	A A	279 37.9 0.3	.	3516	- c	16.6	3932	8 . 3	21.6	18.6 6	3262	7.5	35.7	4.2	0	0.0	o 0	0.0	4208	2.3	88.1	9.8	523	7.7	61.8	2.5	122	20.8	4 8 .8	9 .
	LRN	7946 7.4 9.1	12.8	33371	3.1 7.5	53.8	6956	5. 8.	38.2	11.2	3633	7.6	39.8 6.0	න ග	14	27.7	15.5	0.1	2336	89 .	48.9	ဖ ဗ	275	14.5	32.5	4 .0	88	30.4	35.2	0.
1987	L, MB, GS, RA	261 40.3 0.3	. .	3043		4.61	3750	5	20.6	18 9.	3094	0	83.9	15.6	0	0.0	0.0	0.0	4163	2.4	87.2	21.0	470	8 0	55.6	4 .	122	20.8	48.8	9
	L, MB, GS	5181 8.9 9.5	ທ ຜ	72805	ກ ອ ເຄື່ອ	74.6	12877	2.8	70.8	13.2	5036		55.1	50 77	108	28.2	40.9	0 . 1	531	17.5	7.7	o .u	319	12.6	37.7	6.0 0	44	*	17.6	0.0
	L, MB	1195 19.5 1.4	13.2	6697	oo ru O ru	74.2	763	21.9	4.2	& 4.	198	42.8	2.5	6	0	0.0	o 0	0.0	50	#	<u>-</u>	9 .	œ	*	6. O	0.1	0	0.0	0	0.0
	_	7024 7.7 8.0	44.3	8055	اب دن ه	20.8	223	43.9	1.2	4.	16	*	0.0	9 .0	o	*	9. 4	0.1	ო	*	<u>.</u>	0.0	37	*	4.	0.2	٥	0.0	0	0
		ESTIMATE % STD ERR ROW %	COLUMN %	ESTIMATE	% STD ERR	COLUMN %	ESTIMATE	% STD ERR	ROW %	COLUMN %	ESTIMATE	% STD ERR	% % %	% NUMBER %	ESTIMATE	% STD ERR	ROW %	COLUMN %	ESTIMATE	% STD ERR	ROW %	COLUMN %	ESTIMATE	% STD ERR	ROW %	COLUMN %	ESTIMATE	% STD ERR	ROW %	COLUMN %
		FIXED WING - PISTON: SINGLE ENGINE 1-3 SEATS			SINGLE ENGINE				1-6 SEATS			TWO ENGINES	7+ SEATS			OTHER			FIXED WING -	TURBOPROP:	2 ENGINES	1-12 SEATS			2 ENGINES	13+ SEATS			OTHER	

TABLE 2 - 34
COMPUTED AIRCRAFT TYPE VS. NON-HIERARCHICAL CAPABILITY GROUPS

					1987						PAGE	2 OF 2
		_	L, MB	L, MB, GS	L,MB, GS,RA	LR	RA	M	L, MB, GS, ML	LRN, ML	GROUP	ALL CRAFT
FIXED WING - TURBOJET: 2 ENGINES	ESTIMATE % STD ERR ROW % COLUMN %	0.0 4 * ±.0.	29 0.7 * 9	33.8 4.8 0.2	3890 1.8 4.3 9.4.3	34.0 2.0 2.0 3.1	3925 1.7 95.1 18.5	86 40.0 2.1 4.3	82.4 4.1.4 6.0 6.0	04 8.04 8.0 8.0	0 O 70 * ± O	4126 0.0 1.5
OTHER	ESTIMATE % STD ERR ROW % COLUMN %	28.8 5.1 0.2	0 0 * e · C	114 17.2 17.2 0.1	404 5.2 60.9 0.0	3.1 78.0 0.8	409 5.1 61.7	0 . * rè -	0 0 . 2	0.0 w * ru 4	65 6.9 8.8 1.0	663 0.0
ROTORCRAFT: PISTON	ESTIMATE % STD ERR ROW % COLUMN %	4 8 0 0 8 0 0 8 0 0	0000	92 + . 7 0 . 1	0 0 0 + - 0	613 17.9 11.1	0 0 5 * 6. C	134 39.5 2.4 6.7	000	67 4.2 7.9	4667 2.7 84.7 4.2	5510 0.0
TURBINE	ESTIMATE % STD ERR Row % Column %	253 41.6 5.7 1.6	8 + C 8 + G 8 + G	306 35.7 6.9	610 12.1 13.7 3.1	2725 7.2 61.1 4.4	944 12.5 21.2 4.5	2.0 0.8 0.0	36 2.9 3.9	86 8 * 8 8	1335 13.5 29.9 1.2	4458 0.0 1.7
OTHER AIRCRAFT	ESTIMATE % STD ERR ROW % COLUMN %	0 0 3 * 0 0 0 3 * 0	0000	£ * 1.00 0.0	0.0 0.0	6. 6. 6. 6. 6.	4 + 0 2 + 4:0	0 * ± .0	0.0 0.6	C * T.00	9604 0.6 98.7 8.6	9732 0.0 3.6
ALL AIRCRAFT	ESTIMATE % STD ERR ROW %	15853 5.1 5.9	9031 6.9 3.4	97619 1.3 36.5	19820 2.9 7.4	61981 2.1 23.2	21177 2.8 7.9	2010 13.8 0.8	1240 17.9 0.5	846 19.7 0.3	111835 1.1 41.8	267400

GS - GLIDE SLOPE
L - LOCALIZER
LRN - LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB - MARKER BEACON
ML - MICROWAVE LANDING SYSTEM
RA - RADAR ALTIMETER
NO - NO REGULATORY AVIONICS

* - % STANDARD ERROR GREATER THAN 50%

TABLE 2 - 35 BASE AIRPORT REGION VS. NON-HIERARCHICAL CAPABILITY GROUPS

					1987						PAGE	1 OF 2
		٠	L , MB	L, MB, GS	L, MB, GS, RA	LRN	A A	뉥	L, MB, GS, ML	L'RN, ML	GROUP	ALL CRAFT
ALASKAN	ESTIMATE % STD ERR	549 26.7	400	1412	162	13.4	251 34.0	4 (0 + 1	m * (m * 0	5946 7.8	9271 6.1
	ROW %	ກ. ພ ຍ ຄ	4 4 6 4	15.2 4.4	1.7 0.8	3.2	1.2	9.6 9.0) ()) ()	0.0	. w	_ເ
CENTRAL	ESTIMATE % STD ERR	852 24.2	541 29.9	5376 9.2	1152 16.6 7	3230 11.6	1197 16.5	122	67 * 0	. S5 55 55 55 55	7794 7.4 47.3	16477 5.1
	% NWO NO	. 2 . 4	, O		. ru 5 æ	2.5	5.7	6.	₩.	0 70	7.0	6.2
EASTERN	ESTIMATE % STD ERR ROW %	2253 14.8 7.6	24.0 24.0 2.6 8.6	11447 6.2 38.4	2730 10.0 9.2 13.8	7993 7.1 26.8 12.9	2823 9.8 9.5 13.3	35.8 1.0 1.5	292 36.9 1.0 23.5	164 42,1 0.6 19.4	11506 5.8 38.6 10.3	29802 3.6 11.1
GREAT LAKES	ESTIMATE % STD ERR ROW % COLUMN %	2154 15.0 4.5 13.6	1968 15.4 4.1 21.8	16054 5.1 33.7 16.4	3829 8.8 8.0 19.3	10754 6.2 22.6 17.4	4004 8 8 6 8 8 . 0 . 0	32.8 32.0 0.7 16.3	260 38.2 0.5 21.0	287 33.6 0.6 33.9	21355 4.3 44.9 19.1	47577 2.8 17.8
NEW ENGLAND	ESTIMATE % STD ERR ROW % COLUMN %	527 28.1 4.9 3.3	6. 6. 4. 6. 4. 6. 4. 6. 4. 6. 4.	4537 10.2 41.9 4.6	674 22.5 6.2 3.4	3568 11.2 32.9 5.8	700 22.1 6.5 3.3	0 6 0 + 7; 4	0 6 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25 × 50 · 5 · 6 · 6 · 6 · 6 · 6 · 6 · 6 · 6 · 6	3806 10.3 35.1	10841 6.3 4.1
NORTHWEST MOUNTAIN	ESTIMATE % STD ERR ROW % COLUMN %	1827 14.0 6.3 4.5	1256 24.6 3.2 12.8	9905 8.2 34.2	1916 17.6 7.0 12.8	5204 11.5 20.6 11.3	1807 16.5 7.5 12.7	255 37.1 0.9 17.6	8 * 4 · 0 · 4 · . 7 · . 4 ·	1.0	15201 3.6 44.0 15.2	27980 4.3 14.0
SOUTHERN	ESTIMATE % STD ERR ROW % COLUMN %	3233 12.3 6.8 20.4	1836 16.0 3.8 20.3	19232 4.6 40.2 19.7	2508 11.3 5.2 12.7	8651 7.0 18.1 14.0	2800 10.9 5.9 2.2	261 34.8 0.5 13.0	43.0 4.0 4.2	90 49.1 0.2 10.6	19439 4.4 7.04 17.4	47802 2.7 17.9

TABLE 2 - 35 BASE AIRPORT REGION VS. NON-HIERARCHICAL CAPABILITY GROUPS

					1987						PAGE	5 2 OF 2
		٦	L, MB	L,MB, GS	L,MB, GS,RA	LRN	RA	¥	L, MB, GS, ML	LRN, ML	NO GROUP	ALL
SOUTHWESTERN	ESTIMATE % STD ERR	2192 16.1	798 19.5	12012 6.5	2610 12.1	7985 7.5	3002 9.8	284 36.5	98 44.2	4 *	13012	36120 3.7
	ROW % COLUMN %	5.5 14.2	5.3 6.3	39.8 16.3	14.3 22.5	11.3 19.8	13.5	8 .8 2 .8	2.4.2 2.2	0.3 8.8	39.1 14.5	15.2 2.2
WESTERN-PACIFIC	ESTIMATE % STD ERR ROW %	2235 14.0 5.4	1059 21.4 2.6	18046 4.8 43.6	4355 8.2 10.5	12981 5.6	4582 8.0	247 38.4	118 * * £	5 4 * c	13384 5.5	41362
	COLUMN %	14.1	11.7	18.5	22.0	20.9	21.6	12.3	ງ ທ _ີ	12.3	12.0	15 .5
TOTALS	ESTIMATE % STD ERR ROW %	15853 5.1 5.9	9031 6.9	97619 1.3 36.5	19820 2.9 7.4	61981 2.1 23.2	21177 2.8 7.9	2010 13.8 0.8	1240 17.9 0.5	846 19.7 0.3	111835	267400

GS - GLIDE SLOPE
L - LOCALIZER
LRN - LONG RANGE NAVIGATION - INCLUDES LORAN-C, OMEGA
MB - MARKER BEACON
ML - MICROWAVE LANDING SYSTEM
RA - RADAR ALTIMETER
NO - NO REGULATORY AVIONICS

* - % STANDARD ERROR GREATER THAN 50%

ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES. OPERATIONS OUTSIDE U.S.A TERRITORIES ARE NOT INCLUDED. NOTE:

TABLE 2 - 36
GENERAL AVIATION
NUMBER OF LANDINGS IN LOCAL FLIGHT
BY
AIRCRAFT TYPE AND REGION
1987

PAGE 1 OF

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AIRCRAFT TYPE	ALASKAN	CENTRAL	EASTERN	GREAT LAKES	NEW ENGLAND	NORTHWEST MOUNTAIN	SOUTHERN	SOUTH- WESTERN	WESTERN- PACIFIC	TOTAL	
FIXED WING											
FIXED WING- PISTON											
1 ENG: 1-3 SEATS (% STANDARD ERROR)	26536 5 21.3	747633 21.2	1261454 19.5	2548269 13.5	278398 13.2	1348495	2063258 17.1	2580016 25.2	2723882 17.7	13836754 6.4	
1 ENG: 4+ SEATS (% STANDARD ERROR)	744089 36.4	702849 25.5	1305203 20.6	1681015 11.1	650134 20.5	1089766 10.1	1268926 14.4	1395981 12.5	1663400 18.2	10505382 6.3	
1 ENGINE: TOTAL (% STANDARD ERROR)	1009454 27.4	1450482 16.5	2566657 14.2	4229284 9.2	928532 14.9	2438261 8.0	3332184 11.7	3975997 17.5	4387282 13.0	24342136 4.5	
2 ENG: 1-6 SEATS (% STANDARD ERROR)	5126 *	28747	93140 28.0	95378 34.0	24596 40.2	50994 29.2	138971 32.1	100188	228735 29.2	7 656 87 13.6	
2 ENG: 7+ SEATS (% STANDARD ERROR)	2123	13178	55304 44.5	45850	13345	24100 35.6	60264	59898 48.1	73735	357899 19.7	
2 ENGINE: TOTAL (% STANDARD ERROR)	7249	41925 49.5	148444 24.1	141228 26.7	37941 32.9	75094 22.6	192235 27.9	160086 45.1	302470 25.6	1123586 11.2	
PISTON: OTHER (% STANDARD ERROR)	00.	00.	347	c *	٠*	۲*	4 *	00.	\$20	1871	
PISTON: TOTAL (% STANDARD ERROR)	1016703 27.2	1492407 16.1	2715448 13.5	4370531 9.0	966480 14 . 4	2513362 7.8	3532390 11.2	4136083	4690272 12.3	25467593 4.4	
FIXED WING- TURBOPROP											
2 ENG: 1-12 SEATS (% STANDARD ERROR)	4 72	4171	15735	17896 *	762	6787	3084	39878	33550	122057 33.8	
2 ENG: 13+ SEATS (% STANDARD ERROR)	107	2315	37078	1647	4796	8013 46.3	17383	20138	38701	130040 30.9	
2 ENGINE: TOTAL (% STANDARD ERROR)	179	6486 *	52813 46.4	19543	5558	14800 41.8	20467	60016 *	72251	252097 22.8	
TURBOPROP: OTHER (% STANDARD ERROR)	0 0.0	4 *	1236	702	102	201 *	4287	275179 17.3	. *	281591 *	
TURBOPROP: TOTAL (% STANDARD ERROR)	179	6530	54049 46.2	20245	\$660 *	15001 37.6	124754	335195 17.6	72270	533688 35.6	

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 36
GENERAL AVIATION
NUMBER OF LANDINGS IN LOCAL FLIGHT
BY
AIRCRAFT TYPE AND REGION
1987

PAGE 2 OF

				•	REGION					
AIRCRAFT TYPE	ALASKAN	CENTRAL	EASTERN	GREAT	NEW ENGLAND	NORTHWEST MOUNTAIN	SOUTHERN	SOUTH- WESTERN	WESTERN- PACIFIC	TOTAL
FIXED WING- TURBOJET	ET									
2 ENGINE TURBOJET (% STANDARD ERROR	*	9201	11260	11164	1707	7199	10104	29981 *	13644	104280 27.7
TURBOJET: OTHER (% STANDARD ERROR)	00.0	675 *	2722	1026	157	2066	1981	1898	1461	12088 43.7
TURBOJET: TOTAL (% STANDARD ERROR)	*	9876	13982	12190	1864	19265	12085	31879	15105	116368 25.2
FIXED WING: TOTAL (% STANDARD ERROR	1016883	1508813 15.9	2783479 13.2	4402966 8.9	974004 14.3	2537628 7.6	3569229 11.2	4503157 16.5	4777647 12.1	26117649 4.3
ROTORCRAFT										
PISTON (% STANDARD ERROR)	2860	81600 37.8	140463 36.3	113603 49.5	40462	153784	260910 28.0	298971 16.1	271895 30.8	1365577 13.4
TURBINE (% STANDARD ERROR)	84598	5954 *	234660 27.0	60510 44.0	23170	334105	219910 44.6	101089	243765 25.6	1306672 20.0
ROTORCRAFT: TOTAL (% STANDARD ERROR)	87458	87554 35.6	375123 21.7	174113	63632 29.1	587889 33.8	380820 24.6	398986 47.5	515660 20.2	2672249 12.0
OTHER (% STANDARD ERROR)	* 30	17417	69556 25.6	117645 24.1	20946 34.8	57919 28.3	78365 35.2	289516 310.7	83170 30.3	745048 15.6
TOTAL (% STANDARD ERROR)	1104371 25.5	1613784 15.0	3228158 11.7	4694724 8.5	1058582 13.3	3671325 7.4	4509234 9.9	5591719 14.5	5376477 10.9	29534946 4.0

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 37
GENERAL AVIATION
NUMBER OF LANDINGS IN CROSS COUNTRY FLIGHT
BY
AIRCRAFT TYPE AND REGION
1987

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PAGE 1 OF

					REGION					
AIRCRAFT TYPE	ALASKAN	CENTRAL	EASTERN	GREAT	NEW ENGLAND	NORTHWEST MOUNTAIN	SOUTHERN	SOUTH- WESTERN	WESTERN- PACIFIC	TOTAL
FIXED WING										
FIXED WING- PISTON										
1 ENG: 1-3 SEATS (% STANDARD ERROR)	326060	106818 24.9	220267 22.4	517744 16.5	84424 20.6	274349 18.6	393963 19.3	301984 19.8	433020 16.1	2656645 9 . 2
1 ENG: 4+ SEATS (% STANDARD ERROR)	609450 27.9	364522 14 . 1	571258 10.0	951168 13.1	378761 14.8	936983 10.1	941878 9.4	897917 8.5	956061 11.5	66 1008 1 4 . 9
1 ENGINE: TOTAL (% STANDARD ERROR)	935510 25.3	471340	791525 9.5	1468912 10.3	463185 12.6	1211332 8.9	1335841 8.7	1199901 8.7	1389081 9.4	9266726 4.4
2 ENG: 1-6 SEATS (% STANDARD ERROR)	5680 25.8	75371 31.1	156720 15.0	359578 17.6	62216 35.8	82793 15.5	202837	170912 24.5	342501 12.3	1457696 6.8
2 ENG: 7+ SEATS (% STANDARD ERROR)	9835 31.1	121967 32.5	101549 23.9	144197 22.7	39055	73051 26.8	197434 34.9	100918 28.2	274766 20.6	1161854
2 ENGINE: TOTAL (% STANDARD ERROR)	15515 21.9	197338 23.3	258269 13.1	503775 14.1	101271 30.6	155844 25.8	400271	271830 19.5	617267 11.4	2619550 6.3
PISTON: OTHER (% STANDARD ERROR)	00.	00.	347 24.9	» *	*	00.0	4453	00.	8866 *	13732
PISTON: TOTAL (% STANDARD ERROR)	951025 24.9	668678 11.1	1050141 7.9	1972696 8 . 5	564513	13 67 17 6 7.8	1740565 7.9	1471731 8.1	2015214	11900008 3.7
FIXED WING- TURBOPROP										
2 ENG: 1-12 SEATS (% STANDARD ERROR)	2795	119091 42.4	139813 27.9	270863 26.3	25903 *	215662 42.2	151261 32.9	198309 21.5	293994 18.8	1419382
2 ENG: 13+ SEATS (% STANDARD ERROR)	6461 *	7834	222170 37.9	22362 42.4	27278	119972	19627 *	60597 *	18161 36.8	503865 23.4
2 ENGINE: TOTAL (% STANDARD ERROR)	9256	126925 40.0	361983 25.6	293225 24.5	53181	335634	170888 38.4	258906 37.2	312155 17.9	1923247 10.4
TURBOPROP: OTHER (% STANDARD ERROR)	00.	37	4 *	250	306	40415	490	00.	247	41794
TURBOPROP: TOTAL (% STANDARD ERROR)	9256	126962 40.0	362032 25.6	293475 24.5	53487	676049 18.9	171378 43.2	258906 35.8	312402 17.8	1965041 10.3

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 37
GENERAL AVIATION
NUMBER OF LANDINGS IN CROSS COUNTRY FLIGHT
BY
AIRCRAFT TYPE AND REGION
1987

PAGE 2 OF

NORTHWEST SOUTHERN SOUTH-		T 58 67633 226354 251284 53074 84395 73242 130192 178167 1064207 0R) * 32.9 25.2 17.9 * 28.9 32.6 34.1 20.5 9.5	R 0 4585 15540 11855 50 5806 5240 4998 3498 51574 DR) 0.0 * 31.8 45.4 * 46.1 32.3 * * 18.7	L 58 72218 241894 263139 53124 90201 78482 135190 181665 1115781 JR) * 30.9 23.7 17.2 * 28.2 30.5 19.7 20.1 9.1	. 960339 867858 1654067 2529310 671124 2133426 1990425 4195986 2509281 14980830 JR) 24.6 10.7 8.3 7.4 11.6 9.9 10.2 6.2 6.5 3.3		954 3287 59377 10174 6041 60176 29588 988735 97427 367024 JR) * 33.6 42.8 * 27.1 * 26.3 * 28.3 30.4	14785 4020 155494 23911 31319 673424 75908 699828 163944 1842805 31.3 27.1 31.2	. 15739 7307 214871 34085 37360 733600 105496 1688563 261371 2209829	0 2011 9951 30345 1011 7120 7962 0 2087 60487 IR) 0.0 * 40.9 46.1 * * * 0.0 * 32.3	
ALASKAN		85 *	00	ω 10 *	960339 24.6		0 4 4	14785	15739 *	00.0	976078
AIRCRAFT TYPE	FIXED WING- TURBOJET	2 ENGINE TURBOJET (% STANDARD ERROR)	TURBOJET: OTHER (% STANDARD ERROR)	TURBOJET: TOTAL (% STANDARD ERROR)	FIXED WING: TOTAL (% STANDARD ERROR)	ROTORCRAFT	PISTON (% STANDARD ERROR)	TURBINE (% STANDARD ERROR)	ROTORCRAFT: TOTAL (% STANDARD ERROR)	OTHER (% STANDARD ERROR)	TOTAL

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2 - 38
GENERAL AVIATION
TOTAL NUMBER OF LANDINGS
BY
AIRCRAFT TYPE AND REGION
1987

PAGE 1 OF 2

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				2						
AIRCRAFT TYPE	ALASKAN	CENTRAL	EASTERN	GREAT LAKES	NEW ENGLAND	NORTHWEST MOUNTAIN	SOUTHERN	SOUTH- WESTERN	WESTERN- PACIFIC	TOTAL
FIXED WING										
FIXED WING- PISTON										
1 ENG: 1-3 SEATS (% STANDARD ERROR)	592699 28.6	855922 20.4	1482362 19.0	3068235 13.4	363603 13.0	1622844 14.9	2457221 16.1	2882000 25.7	3164192 16.5	16524343 6.1
1 ENG: 4+ SEATS (% STANDARD ERROR)	1370949 26.6	1069034 20.5	1876667 15.8	2633942 10.5	1030039 17.0	2026749 10.8	2210804 9.2	2293898 11.5	2618725 14.2	17140099 4.9
1 EMGINE: TOTAL (% STANDARD ERROR)	1963648 20.5	1924956 14.6	3359029 12.2	5702177 8.7	1393642 13.0	3649593 9.7	4668025 9.6	5175998 11.5	5782917 11.1	33664442 3.9
2 ENG: 1-6 SEATS (% STANDARD ERROR)	10682	104206 27.7	250728 15.2	454826 15.0	86836 30.2	133787 25.6	341808 19.1	271100 25.5	570296 13.6	2223780 6.6
2 ENG: 7+ SEATS (% STANDARD ERROR)	11687 30.3	135457 28.8	156573 24.1	189463 20.8	53117 49.6	97151 35.5	259904 29.2	1608 16 25. 1	355485 18 . 1	1528426 9.5
2 ENGINE: TOTAL (% STANDARD ERROR)	22369	239663 20.2	407301	644289 12.2	139953 26.6	230938 23.2	601712 15.7	431916	925781 10.9	3752206 5.5
PISTON: OTHER (% STANDARD ERROR)	00.	00.	695	* 58	ស ម	٠*	5273 37.2	0	10434	16502 43.8
PISTON: TOTAL (% STANDARD ERROR)	1986017 20.3	2164619 13.1	3767025 10.9	6346494 7.9	1533660 12.1	3880538 8 . 4	5272955 8.9	5607814 12.1	6719132 9.6	37433150 3.5
FIXED WING- TURBOPROP										
2 ENG: 1-12 SEATS (% STANDARD ERROR)	2862 *	123116 37.6	155667 24.1	290829 23.6	26630	222449 41.7	54345 39.1	238187	326458 15.2	1542136 10.5
2 ENG: 13+ SEATS (% STANDARD ERROR)	6569 *	10130	257159 34.5	24030 39.5	31984	127985 31.3	37010	80735	55924 *	624007 19.8
2 ENGINE: TOTAL (% STANDARD ERROR)	9431	133246 35.1	412826 23.3	314859 22.0	58614	350434 8.7	191355 39.2	318922 41.2	382382 15.1	2166143 9.4
TURBOPROP: OTHER (% STANDARD ERROR)	00.	œ *	1285	95 3	4 80 *	40616	4747	275179	267	324458 *
TURBOPROP: TOTAL (% STANDARD ERROR)	9431	133327 35.1	414111	315812 21.9	59022 *	691050	196132	594101 31.3	382649 15.1	2490601 11.0

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

AIRCRAFT TYPE AND REGION TABLE 2 - 38 GENERAL AVIATION TOTAL NUMBER OF LANDINGS

PAGE 2 OF

					1987					
				_	REGION					
AIRCRAFT TYPE	ALASKAN	CENTRAL	EASTERN	GREAT	NEW ENGLAND	NORTHWEST MOUNTAIN	SOUTHERN	SOUTH- WESTERN	WESTERN- PACIFIC	TOTAL
FIXED WING- TURBOJET										
2 ENGINE TURBOJET (% STANDARD ERROR)	6 10 *	76565 30.0	243142	262425 15.8	54864	91594 27.4	83391 29.2	133280	190842 18.5	1171073
TURBOJET: OTHER (% STANDARD ERROR)	00.	5210 44.1	18153 26.0	12879 38.6	*	7696 39.8	7221 30.4	6746	5043 45.3	63490 16.2
TURBOJET: TOTAL (% STANDARD ERROR)	en *	81775 28.3	261295 19.8	275304 15.2	55071 *	99172 26.8	90567 27.2	167069 25.5	195885 18.1	1234563 7.9
FIXED WING: TOTAL (% STANDARD ERROR)	1995507 20.2	2379721 12.2	4442431 9.6	6937610 7.3	1647753 11.5	4664820 9.3	5559821 6.7	6241294 10.2	7297666 8.9	41158314
ROTORCRAFT										

* INDICATES A STANDARD ERROR GREATER THAN 50.0%

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

15.6

38.0

*

44.4

39.5

48.6

28.6

30.4

35.9

e *

OTHER (% STANDARD ERROR)

13.8

37.9

21.9

28.8

24.3

34.9

17.0

32.1

ROTORCRAFT: TOTAL (% STANDARD ERROR)

20.7

35.2

31.1

43.2

20.2

39.6

TURBINE (% STANDARD ERROR)

26.0

30.2

25.8

38.1

31.2

35.8

37.6

PISTON (% STANDARD ERROR)

3.5

8.1

9.8

7.9

9.2

10.8

8.6

19.4

TOTAL (% STANDARD ERROR)

APPENDIX A.1: FIRST MAILING COVER LETTER



U.S. Department of Transportation

Federal Aviation Administration 800 Independence Ave., S.W. Washington, D.C. 20591

March 1988

Dear Aircraft Owner:

Since 1977, the Federal Aviation Administration (FAA) has asked the Transportation Systems Center (TSC), of the Department of Transportation, Cambridge, MA, to conduct the annual General Aviation Aircraft Activity and Avionics Survey. Data collected from the annual survey are used by the Federal, state and local governments, as well as by private industries and individuals, for safety analyses, planning, forecasting, research and development. Thank you for your past cooperation in responding to the survey request for information.

The enclosed 1987 General Aviation Aircraft Activity and Avionics Survey questionnaire (FAA Form 1800-54) requests data for calendar year 1987. Your aircraft is one of approximately 28,000 general aviation aircraft selected to be surveyed. Since the survey sample is randomly selected, it is possible that your aircraft may be selected in successive years or that more than one of your aircraft may be selected this year. It could happen more often if the number of aircraft of the type you own is small. When more than one of your aircraft is selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the identified aircraft which was registered under your name in the FAA Aircraft Registration Files as of December 31, 1987. If you cannot provide a precise answer to any questions, make your best estimate.

If your aircraft was sold prior to January 1987, please forward this mail to the new owner of the aircraft or return the mail to TSC with a note. If your aircraft was operated primarily by another (leased, etc.), please obtain the necessary information from the operator, or forward this mail to that person or firm for response. If your aircraft was operated under FAR Part 121 and 127, please so indicate in question 2 and return the form to TSC.

Whether your aircraft was in use or not in use at all during 1987 is equally important to the estimate of active aircraft and hours flown. If your aircraft, for whatever reason, was not in use during calendar 1987, check questions 5 and 12 and return the form to TSC.

A prompt response will eliminate additional follow-up contacts. Your complete and timely response is very inportant to the quality of the survey results. Mail your response in the enclosed self-addressed postpaid envelope today.

We appreciate your cooperation.

Sincerely,

Lawrence R. Kelly, Jr.

Manager, Management Standards and Statistics Division

Enclosure

A-1

APPENDIX A.2: SECOND MAILING COVER LETTER



800 Independence Ave., S.W. Washington, D.C. 20591

April 1988

Dear Aircraft Owner:

In February, the Federal Aviation Administration (FAA) asked the Tranportation Systems Center (TSC) to send aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the 28,000 aircraft owners selected at random to receive a questionnaire. Since the survey is based on a random sample of general aviation aircraft, your response is very essential to making the survey results comprehensive, accurate, and timely. As of this date, we have not received your response. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. Please mail your response with the enclosed self-addressed postpaid envelope within 3 days.

If you have already responded, disregard this notice. We appreciate your cooperation.

Sincerely

Lawrence R. Kelly, Jr.

Manager, Management Standards and Statistics Division

Enclosure

APPENDIX A.3: THIRD MAILING COVER LETTER



800 Independence Ave., S.W. Washington, D.C. 20591

May 1988

Dear Aircraft Owner:

In February 1988, the Tranportation Systems Center (TSC), on behalf of the Federal Aviation Administration (FAA), sent aircraft owners a questionnaire as a part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the 28,000 aircraft owners selected at random to receive a questionnaire. As of this date, we have not yet received your response. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. As we explained to you in our previous correspondence, your timely response to the survey request is very important to the quality of the survey results. It will be of benefit not only to the FAA, but also to the aviation community as a whole. Please respond today.

If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely

Lawrence R. Kelly, Jr.

Manager, Management Standards and Statistics Division

Enclosure

APPENDIX A.4: SURVEY QUESTIONNAIRE

	CONTROL NUMBER	US Department of Ironsportation Federal Autoriton Administration	AN (As	D A of D	AVIATION ACTIVITY VIONICS SURVEY ecember 31, 1987) OM8 NO 212	0-0060
coc	operation is needed to mail	ce the results of this survey o	omorehen:	SIVO.	 as amended. While you are not required to respond accurate and timely. Information collected in this surfacilities and services and not to disclose individual 	rvev will
[[MSTRUCTIONS: Please and the completed questionnal	wer questions for the aircra re in the enclosed postage p	ift at right. said envelo	Mail pe to	2. AIRCRAFT CHARACTERISTICS N- Transportation Systems Center- Kendall Square Cambridge, Massachusetts 0214.	
3.	air carrier <u>under FAR Parts</u> this aircraft to such an air		or lease	10.	In 1987, what percent of the hours did this aircraft fly under the following conditions? (a, b, c, and d should add to 100%.) Day Flyng	%
	should be compl and aircraft ope on-demand air t	remaining questions. This fi leted for all general aviation rated under Part 135, comm axi.) e the rest of this form, but r	n aircraft outer and		Visual (VMC) a Instrument (IMC) b Night Flying visual (VMC) Construment (IMC) c	
4.	address shown a	above.)		11	TOTAL Was this aircraft flown on an Instrument Flight	188% IFR HOURS
Ļ.	this aircraft based as of D Was the aircraft flown in (cember 31, 1987?			Plan in 1987? 1. Yes 2 No If "Yes," how many hours were flown on an Instrument Flight Plan?	*******
6.	1. Yes 2. No (S How many hours did this categories below during to Please estimate use for re		HOURS IN 1967	12.		TIME HOURS
_	EXECUTIVE/CORPORATE T	RANSPORTATION-		13.	AVIONICS EQUIPMENT CAPABILITY ("X" ALL boxes that reflect this aircraft's current call finding, check the last box in each group.)	pability
	BUSINESS TRANSPORTAT aircraft for business transp				VHF COMMUNICATIONS EQUIPMENT 360 Channels or less	
	PERSONAL-Flying for pers business transportation)				720 Channels or more b. More than One Communications System c. No VHF Communications Equipment d TRANSPONDER EQUIPMENT	
	INSTRUCTIONAL-Flying ur flight instructor (excludes				4096 Code e Altitude Encoding Equipment f	
L	AERIAL APPLICATION-Agr cloud seeding, firefighting	, insect control, etce			No Transponder Equipment	
	survey, patrol, fish spottin hunting, highway traffic a				100 Channels h 200 Channels h Wore than One VOR Receiver J Automatic Orection Finder (ADF) k Distance Measuring Equipment (DME)	
L	towing gliders, etc	achuting, aerial advertising g			Area Navigation Equipment (RNAV) m. Long Range Navigation Equipment LORAN C n OMEGA-VLF o	
	COMMUTER AIR CARRIER 135, at least five schedule carries mail	d round trips per week or h.			Other (Doppler, INS, Other) p. Radar Altimeter q Weather Radar No Navigation Equipment s	
	AIR TAXI-FAR Part 135 pai operations excluding com What was the average hour for this aircraft in operation?	muter air carrier i revenue (dollars) per			PRECISION APPROACH EQUIPMENT Localizer t Marker Beacon u Glide Slope v Microwave Landing System w	
	OTHER-Experimentation, demonstrations, governments				No Precision Approach Equipment	
7.	Was the aircraft rented or 1 ☐ Yes 2 ☐ No If "Yes," how many rent		HOURS		Electronic Flight Instrument System (EFIS) aa Flight Management Computer bb Autopilot	
8.	What was this aircraft's a consumption (gals/hour)? Estimate the percent of e		GALAHI		1 Axts (Wing Leveler) cc 2 Axts (Heading and Track) dd 3 Axts (Heading, Track, and Altitude) ee Autoland floor Guidance and Control Equipment gg	
	Jet fuel			14.	What were the maintenance expenses for this aircraft in 1987?	1
	100 Octane 100 Octane-Low Lead Automotive Gasoline	d .		15.	What was the cost to insure this aircraft in 1987? (include liability, medical and hull.)	3
	Total (b -f. should add to What was the average co	100%)g.	100%	16.	Do you own one or more ultralights? 1. Yes 2. No if "Yes," how many?, and how many hours in total was it (were they) flown?	HOURS
9.	How many landings, inch landings, did this aircraft following categories duri	uding touch and go perform in each of the ng Calendar Year 1967?	NO. OF LANDINGS	17.	Comments Your comments are invited to assist us in improving survey. Please use reverse side of this form.	this
L	Number of landings in loc Number of landings in cro	al flight a. oss-country flight b.		L		

FAA Form 1800-54 (2-88)

THANK YOU FOR YOUR COOPERATION

APPENDIX B SAMPLE DESIGN

B.1 SAMPLE FRAME AND SIZE

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for 3 years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

- 1) The accuracy of owners' addresses deteriorated, causing the percentage of questionnaires returned by the post office to almost triple from 1977 to 1982. Post office returns have since increased to nearly 13 percent in 1987, of the original sample of aircraft selected. This partially accounted for the lower survey response rates experienced since 1977.
- 2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

- 1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and
- 2) aircraft owned by non-U.S corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

- 1) Aircraft registered to dealers.
- 2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.
- 3) Aircraft with a known inaccurate owner's address.
- 4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1987, the sample frame consisted of 267,400 general aviation aircraft records from which 29,719 records were sampled, yielding a 11.1 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

B.2 DESCRIPTION OF SAMPLE DESIGN

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

- 1) State or territory of aircraft registration.
- 2) A variable called the makermodel index constructed from a combination of the computed aircraft type and the Service Difficulty Reporting (SDR) aircraft manufacturer/model group.

The 58 levels of the state criterion and the 372 levels of the make-model index yielded a matrix of 58 by 372 or 21,576 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells, yielding a final sample size of 29,719 general aviation aircraft.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, and which corresponded to the number of aircraft in

TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE

ТҮРЕ	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
<u>Piston</u>			
1 engine, 1 - 3 seats	87,809	9,726	11.1
1 engine, 4+ seats	121,486	8,007	6.6
2 engines, 1 - 6 seats	18,196	2,154	11.8
2 engines, 7+ seats	9,161	2,001	21.8
Other Piston	322	209	64.9
<u>Turboprop</u>			
2 engines, 1-12 seats	4,775	758	15.9
2 engines, 13+ seats	846	343	40.5
Other Turboprop	250	56	22.4
<u>Turbojet</u>			
2 engines	4,126	844	20.5
Other Turbojet	663	374	56.4
Rotoreraft		1	
Piston	5,555	2,360	42.5
Turbine	4,479	811	18.1
Other	9,732	2,076	21.3
TOTAL	267,400	29,719	11.1

TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	9,225	1,267	13.7
Central	16,499	2,503	15.2
Eastern	29,847	3,803	12.7
Great Lakes	47,656	4,339	9.1
New England	10,690	2,230	20.9
Northwest Mountain	26,375	2,903	11.0
Southern	41,635	4,933	11.8
Southwestern	37,825	2,700	7.1
Western-Pacific	46,820	5,041	10.8
TOTAL	267,400*	29,719	11.1

 $[{]m *Note:}$ Column summations may differ from printed totals due to estimation procedures.

PERCENT OF TOTAL POPULATION

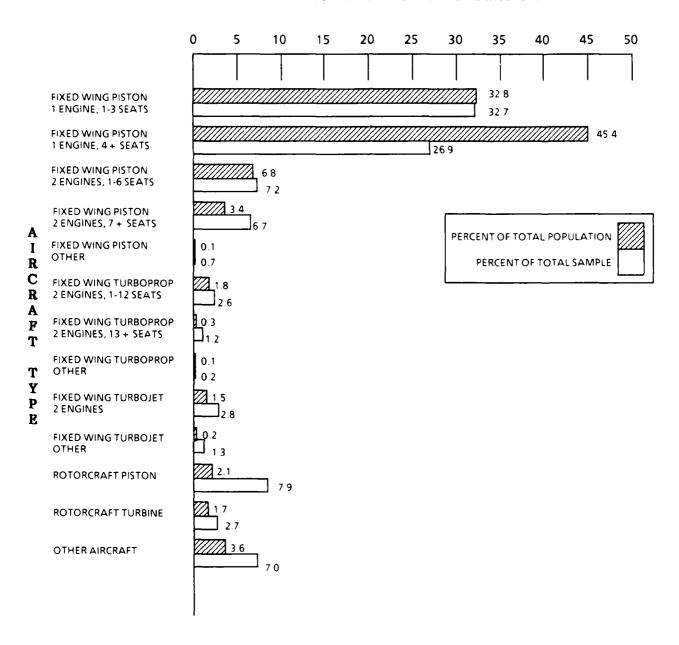
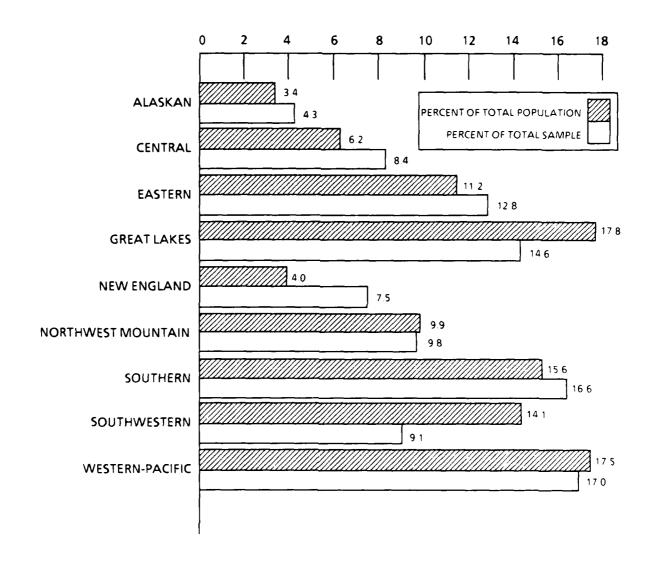


FIGURE B.1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE

PERCENT OF REGISTERED AIRCRAFT



R

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FIGURE B.2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTION BY REGION OF REGISTERED AIRCRAFT

the sample frame represented by that aircraft. When all responses to the survey were tallied, each weight was adjusted according to the response rate for the cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

- 1) Non-respondents' weights were changed to zero.
- 2) The weights of all responding aircraft were adjusted uniformly by dividing the initial weight by the response rate for the cell.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures.

B.3 ERROR

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors. Sampling errors occur because the estimates are based on a sample -- not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

B.3.1 Sampling Error

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model characteristics, and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for

Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14.

all estimated quantities. In some cases, the tables contain the percent standard error, which is the standard error multiplied by 100 divided by the corresponding estimate. The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be $2813 \pm 2(140)$ or (2533, 3093). One would say that the number of active rotorcraft with piston engines lies somewhere between 2533 and 3093 with 95 percent confidence.

B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- To improve the response rate, second and third mailings to non-respondents were conducted in addition to the original mailing, since a low response rate is a major cause of non-sampling error. A total of 61.1 percent of those aircraft sampled responded to a least one question of the survey. The 1987 rate marks a decline over the 80 percent response achieved in 1977, the first year of the survey, and over the 63.7 percent response from the previous survey in which a third mailout was performed. Other possible causes of the decrease include:
 - 1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This caused a gradual increase in the percentage of questionnaires returned undelivered by the postmaster.

2) Repeated sampling of aircraft in 2 and possibly 3 or 4 successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer/model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1987 than in previous years.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. Only one region, Alaskan, had a response rate lower than 50 percent, but this region represents only 4.3 percent of the fleet. Two aircraft types had response rates of less than 40 percent, fixed wing twin engine piston aircraft with seven or more seats, and the other piston group. These two groups, however, represent only 7.4 percent of the fleet.

- The survey questionnaire was designed and pre-tested to minimize misinterpretation of questions by the aircraft owners.
- To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."
- Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.
- The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

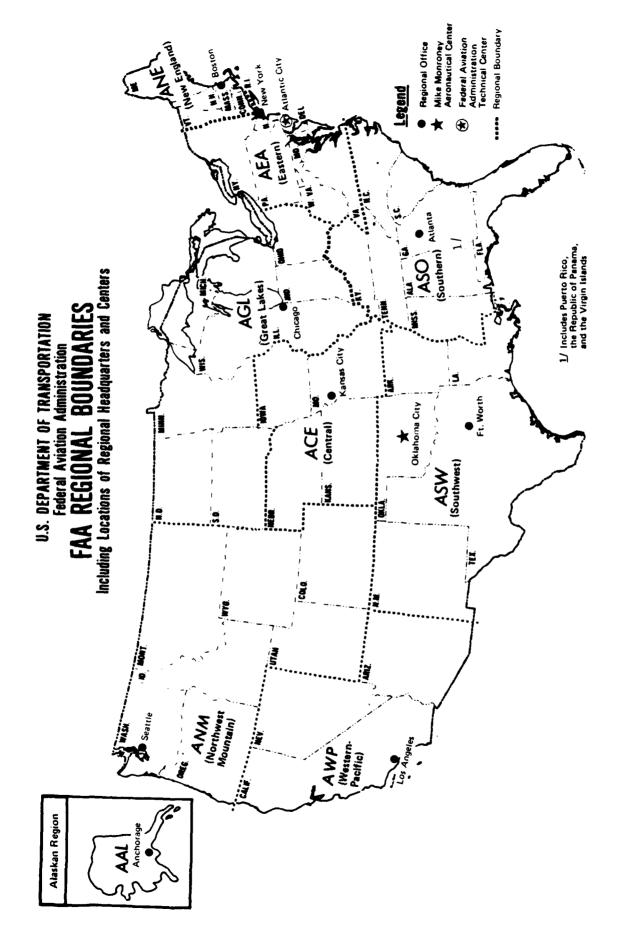
¹See Appendix A.1.

TABLE B-4. RESPONSE RATES BY REGION

REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	46.8	Northwest Mountain	57.3
Central	63.2	Southern	55.1
Eastern	61.2	Southwestern	57.1
Great Lakes	63.8	Western-Pacific	55.4
New England	60.4		

TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	63.8	2 engines	62.0
1 engine, 4+ seats	62.1	Other	51.3
2 engines, 1-6 seats	55.6		
2 engines, 7+ seats	39.3	Rotorcraft	
Other	29.7	Piston	50.2
		Turbine	45.6
Turboprop		l E	
2 engines, 1-12 seats	57.7	Other	59.2
2 engines, 13+ seats	42.6		
Other	48.2		



APPENDIX D SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR_	FAA	SDR	FAA
ADAMS A50S	0050101	AMEGLEEAGLET	0650106	AMTRLASPEC	05601SU
ADAMS ASOS	0050103	AMEGLEEAGLET	0650108	AMTRMFF2	0562581
ADAMS ASOS	0050105	AMERANS56	0580104	AMTRMSF85	05613KQ
ADAMS AB	0050100	AMERAPPILGRM	0620104	AMTRNANORD	6380102
ADAMSTT 11	8950104	AMTR 3A	05601BP	AMTRPAPUSHER	05613KS
AERORSJ2	5500604	AMTR 850	0566042	AMTRPEFLTSTR	05644KB
AEROSP262 AEROSP262	6380524 6380526	AMTR A4C AMTR AA4	7710110 05637P8	AMTRPIAX3 AMTRPIAX3	05604T4 05604T8
AEROSP360	8680662	AMTR AN1	70401RZ	AMTRPIAX3	05604UQ
AEROSP601	8680661	AMTR AOP	0881210	AMTRPIAX3	05637C2
AEROSPAS355	8680805	AMTR B10	0566605	AMTRPIAX3	05637C9
AEROSPAS355	8680806	AMTR BIPE	05601ZE	AMTRPIAX3	7001213
AEROSPAS355	8680810	AMTR BZR	056134H	AMTRREPANTHR	05676K6
AEROSPATR42	8680920	AMTR C2	0563781	AMTREADLAYRY	0569021
AEROSPSA316 AEROSPSA316	8680207 8680515	AMTR DK1 AMTR DRFTR	0564406 05675WR	AMTRSAPLAYBY AMTRSGF12	86502M1 47008B1
AEROSPSA316	8680605	AMTR DS1	056136N	AMTRSGF9	4700337
AEROSPSA316	8680615	AMTR EASY2	0563804	AMTRTCATAC	05613GZ
AEROSPSA319	8680607	AMTR GEM260	05613FX	AMTRTUMR 1	05601F8
AEROSPSA365	8680669	AMTR HP11	0564752	AMTRVDOWL	0562154
AERPEGM100S	0200506	AMTR HUMMER	0564475	AMTRWAWAG	05655TP
AERSPC377	0160208	AMTR JM101	05601UN	AMTRWTDFA	9790161
AETNA 2SA AGUSTA205	0220102	AMTR KNGCOB	05613EB	AMTRXPCUBEAA ANDGRN14	05611B6 0740102
AGUSTA205 AGUSTA206AGS	1181414 0260301	AMTR KV3 AMTR LGTHZR	0560887 0564573	ARACETSPORT	0840102
AGUSTAA 109	0260109	AMTR P51X	1690462	ARACETSPORT	0840110
AGUSTAA 109	0260120	AMTR REPDGA	0566171	ARCRNEH37	8141617
AIRBLDPRNCX	0320102	AMTR RICE	05601YQ	ARCRNEH37	8142801
AIRBUS300	3930104	AMTR RS15	05647AL	ARCTICS 1A	1850202
AIRBUS300	3930306	AMTR S14	0566157	ARCTICS 1A	1850204
AIRMECA1	0400102	AMTR SCPTR1	05613PE	ARCTICS 1A	1850206
AIRMECA1 AIRMECA1	0400106 0400108	AMTR SILUET AMTR SKYSCT	05613FD 05613HH	ARCTICS1A ARCTICS1A	1850208 1850210
AIRMECA1	0400108	AMTR SNOPIP	05613FM	ARCTICS 1A	1850210
AIRMECA1	0400302	AMTR SNOOP2	05613DZ	ARCTICS 1A	1850216
AIRPTSA	0144202	AMTR SPAD7	05608A7	ARCTICS 1B1	1850302
AIRPTSA	0144204	AMTR SPTBPL	05655D1	ARCTICS 1B1	1850308
AIRPTSA	0144206	AMTR TC2	056139R	ARCTICS 1B2	1850303
AIRPTSA	1850102	AMTR TMK	4220120	ARMWHT650101	0820122
AIRPTSA AIRPTSA	1850104 1850106	AMTR VAN AMTR W11	0561383 05653C6	AROCARAROCAR AROCARAROCAR	0100102 0100104
AIRPTSA	1850108	AMTR WD6	056013R	ARONCA15	0191202
AIRPTSA	1850110	AMTR WODSTK	05647Y3	ARONCA15	0191204
AIRPTSA	1850112	AMTR XTC	9570728	ARONCA58	0191002
AIRPTSA	1850114	AMTR ZIA	0130240	ARONCA58	0191006
AIRPTSA	1850118	AMTR ZPYSPT	05646BN	ARONCA58	0191008
AIRPTSA	1850120	AMTR ZUNI	0130202	ARONCA58	0191010
AIRPTSA AIRPTSA	1850122 4570620	AMTR ZUNI AMTRAABBYACE	0130230 00301CD	ARONCA65 ARONCA65	0190802 0190902
AIRPTSA	4570624	AMTRAAJRACE	0030100	ARONCA65	0190906
AIRSPC18	0440104	AMTRAIPIXIE	0564215	ARONCA65	0190908
AIRTRCAT300	0390101	AMTRASSTRLIT	05613UQ	ARONCA65	0190910
AIRTRCAT300	0390103	AMTRATFALCXP	05658MR	ARONCA65	0190914
AIRTRCAT300	0390104	AMTRAV400	05613EU	ARONCA65	0190918
AIRTRCAT400	0390202	AMTRBA1918	05611CH	ARONCA65	0191016
AIRTRCAT400 ALCAIRARGO	0390203	AMTRBIWT11	05613LA	ARONCAC2	0190102
AMD FALC10	0530102 2730101	AMTRBSCONCPT AMTRBTBARNET	1240104 05602VE	ARONCAC2 ARONCAC3	0190104 0190302
AMD FALCEO	2720302	AMTRCZCOZY	05602VE	ARONCAC3	0190304
AMD FALC20	2720304	AMTROFKITFOX	05613LZ	ARONCAF	0190702
AMD FALC20	2720306	AMTRDNBD2	05601GX	ARONCALB	0190604
AMD FALC20	2730103	AMTREWEA230	05613LX	ARONCALC	0190606
AMD FALC20	2730150	AMTRGTTS 1	05663CK	ARONCAM	0190504
AMD FALCSO	2730106	AMTRUBBRIANS	05613BR	AUGSBUK630	05604MR
AMEGLEEAGLET AMEGLEEAGLET	0650102 0650104	AMTRJCCURLES AMTRKCKRIST	05675SP 05613LK	AVIANWCLIPPR AVIANWFALCON	0900108 0900102
	3000104	HELINDONNES I	330 , JLN	THE PROPERTY IN COUNTY	0000102

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
AVIANWMAGNUM	0900110	BBAVIA7	21101PT	BEECH 23	1151215
AVIANWSKYHWK	0900104	BBAVIA7	21101PY	BEECH 23	1151216
AYRES S2	0143006	BBAVIA8	1220803	BEECH 23	1151226
AYRES S2	0143010	BBAVIA8	2110612	BEECH 23	1151240
AYRES S2 AYRES S2	0143012	BCRAFTHB	1110102	BEECH 23 BEECH 23	1151242 1151250
AYRES S2	0143022 0970100	BEAGLE121 BEAGLE121	1120424 1120425	BEECH 23	1151250
AYRES S2	0970101	BEECH 100	1152915	BEECH 23	1151253
AYRES S2	0970105	BEECH 100	1152916	BEECH 23	1151254
AYRES S2	0970106	BEECH 100	1152919	BEECH 300	1152930
AYRES S2	0970107	BEECH 17	1150504	BEECH 33	1151402
AYRES S2 Ayres S2	0970202 0970210	BEECH 17 BEECH 17	1150508 1150512	BEECH 33 BEECH 33	1151404 1151406
AYRES S2	0970215	BEECH 17	1150512	BEECH 33	1151408
AYRES S2	7630202	BEECH 17	1150524	BEECH 33	1151410
AYRES S2	7630203	BEECH 17	1150530	BEECH 33	1151422
AYRES S2	7630303	BEECH 17	1150534	BEECH 33	1151423
AYRES S2 AYRES S2	8380202 8380204	BEECH 17	1150538	BEECH 33 BEECH 33	1151424 1151425
AYRES S2	8380206	BEECH 17 BEECH 17	1150550 1150554	BEECH 33	1151432
AYRES S2	8380302	BEECH 17	1150556	BEECH 33	1151434
AYRES S2	8380306	BEECH 17	1150558	BEECH 33	1151435
BAC 111	1480204	BEECH 17	1150564	BEECH 35	1151502
BAC 111	1480208	BEECH 18	1150202	BEECH 35	1151504
BAC 111 BAC 111	1480210 1480268	BEECH 18 BEECH 18	1 150204 1 150702	BEECH 35 BEECH 35	1151506 1151508
BAC 111	1480280	BEECH 18	1150902	BEECH 35	1151510
BAC 111	1480283	BEECH 18	1150904	BEECH 35	1151512
BAC 146	1500266	BEECH 18	1150909	BEECH 35	1151514
BAG B206	1121223	BEECH 18	1150911	BEECH 35	1151516
BAG B206 BAG DH125	1121224	BEECH 18	1150912	BEECH 35 BEECH 35	1151518
BAG DH125 Balwksfirefy	4230170 1050100	BEECH 18 BEECH 18	1150913 1151001	BEECH 35	1151520 1151522
BALWKSFIREFY	1050101	BEECH 18	1151004	BEECH 35	1151524
BALWKSFIREFY	1050103	BEECH 18	1151006	BEECH 35	1151526
BALWKSFIREFY	1050104	BEECH 18	1151007	BEECH 35	1151528
BALWKSFIREFY	1050107	BEECH 18	1151008	BEECH 35	1151530
BALWKSFIREFY BALWKSFIREFY	1050109 1050110	BEECH 18 BEECH 18	1151010 1151011	BEECH 35 BEECH 35	1151532 1151538
BALWKSFIREFY	10501A9	BEECH 18	1151012	BEECH 35	1151544
BARNADD31	1030104	BEECH 18	1151013	BEECH 35	1151546
BARTLTLC13	1050102	BEECH 18	1151014	BEECH 35	1151548
BBAVIA11	0191102	BEECH 18	1151016	BEECH 36	1151602
BBAVIA11 BBAVIA11	0191104 0191106	BEECH 18 BEECH 18	1151018 1151019	BEECH 36 BEECH 36	1151603 1151604
BBAVIA11	0191108	BEECH 18	1151019	BEECH 36	1151605
BBAVIA11	0191112	BEECH 18	1151021	BEECH 36	1151606
BBAVIA11	9140404	BEECH 18	1151022	BEECH 36	1151607
BBAVIA402	2110204	BEECH 18	1151023	BEECH 36	1151609
BBAVIA7 BBAVIA7	2110102 2110106	BEECH 18 BEECH 18	1151024	BEECH 45 BEECH 45	1152002 1152006
BBAVIA7	2110108	BEECH 18	1151026 1151040	BEECH 45	1152008
BBAVIA7	2110116	BEECH 18	1151042	BEECH 45	1152010
BBAVIA7	2110120	BEECH 18	1151044	BEECH 45	1152012
BBAVIA7	2110124	BEECH 1900	1154160	BEECH 45	1152013
BBAVIA7 BBAVIA7	2110126	BEECH 1900	1154161	BEECH 45	1152014
BBAVIA7	2110130 21101MW	BEECH 200 BEECH 200	1152920 1152922	BEECH 50 BEECH 50	1152502 1152506
BBAVIA7	21101N8	BEECH 200	1152924	BEECH 50	1152510
8BAVIA7	21101NG	BEECH 200	1152926	BEECH 50	1152512
BBAVIA7	21101NN	BEECH 200	1152928	BEECH 50	1152516
BBAVIA7	21101NS	BEECH 23	1151202	BEECH 50	1152518
BBAVIA7 BBAVIA7	21101P3 21101PH	BEECH 23 BEECH 23	1151204 1151208	BEECH 50 BEECH 50	1152520 1152522
BBAVIA7	21101PK	BEECH 23	1151208	BEECH 50	1152524
BBAVIA7	21101PN	BEECH 23	1151214	BEECH 50	1152526

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SD	R	FAA	SI	DR	FAA	SDR	FAA
BEECH	50	1152530	BELL	214	1182106	BELL 47	8930102
BEECH		1152532	BELL	222	1182122	BELL 47	8930103
BEECH		1152534	BELL	222	1182124	BELL 47	8930105
BEECH		1152536	BELL	222	1182140	BELL OH13H	2390204
BEECH		1152702	BELL	412	1182202	BELL P63	1180202
BEECH		1152704 1152706	BELL BELL	47 47	1180604	BELL P63	1180204
BEECH		1152708	BELL	47	1180606 1180702	BELL 204 BIMONDCB1	1181402
BEECH		1152729	BELL	47	1180802	BLANCA11	2370152 0191110
BEECH		1152730	BELL	47	1180808	BLANCA1412	1200902
BEECH		1152732	BELL	47	1180809	BLANCA1413	1201002
BEECH		1152736	BELL	47	1180810	BLANCA1413	1201004
BEECH BEECH		1152738 1152740	BELL BELL	47	1180813	BLANCA1413	1201006
BEECH		1152744	BELL	47 47	1180816 1180820	BLANCA1419	1220402
BEECH		1152746	BELL	47	1180822	BLANCA1419 BLANCA1419	1220404 1220406
BEECH	60	1153602	BELL	47	1180843	BLANCA1419	1220408
BEECH		1153604	BELL	47	1180844	BLANCA1419	3080102
BEECH		1153605	BELL	47	1180845	BLANCA1419	3080104
BEECH		1152802	BELL	47	118084C	BLANCA1419	3080106
BEECH		1152803 1152805	BELL	47	118084G	BLANCA1419	3080108
BEECH		1153005	BELL	47 47	118084R 118084V	BLANCA1419	3080112
BEECH		1153007	BELL	47	1180904	BLANCA1419 BLANCA1419	3080114
BEECH		1152806	BELL	47	1181001	BLANCA1419	3080116 3080118
BEECH		1152807	BELL	47	1181002	BLANCA1419	3080122
BEECH		1152808	BELL	47	1181003	BLANCA1419	3080124
BEECH		1152809	BELL	47	1181005	BLANCA1419	3080126
BEECH		1152812	BELL	47	1181006	BLANCA1419	3080128
BEECH		1152904 1152907	BELL BELL	47 4 7	1181008	BLANCA1419	4580806
BEECH		1152908	BELL	47	118100V 1181010	BLANCA1419 BLANCA149	4580808
BEECH		1152909	BELL	47	1181011	BLANCA149	1200802 1200804
BEECH	90	1152912	BELL	47	1181012	BLANCA17	1220432
BEECH		1152913	BELL	47	1181013	BLANCA17	1220433
BEECH		1152914	BELL	47	1181014	BLANCA17	1220434
BEECH		1153402 1153404	BELL	47	1181023	BLANCA17	1220435
BEECH		1153406	BELL Bell	47 47	1181024 1181025	BLANCA17	1220436
BEECH		1153408	BELL	47	1181025	BLANCA17 BLANCA51	1220437 1225051
BEECH	95	1153410	BELL	47	1181027	BLANCA7	1220438
BEECH		1154002	BELL	47	1181028	BLANCA7	1220460
BEECH		1154003	BELL	47	1181029	BLANCA7	1220501
BEECH		1154004	BELL	47	1181030	BLANCA7	1220601
BELL	204	1154006 1181401	BELL Bell	47	1181031	BLANCA7	1220701
BELL	204	1181404	BELL	47 47	1181032 1181033	BLANCA7	2110104
BELL	204	1181405	BELL	47	1181034	BLANCA7 BLANCA7	2110110 2110112
BELL	204	1181407	BELL	47	118103Z	BLANCA7	2110114
BELL	204	1181408	BELL	47	1181060	BLANCA7	2110136
BELL	204	1181410	BELL	47	1181061	BLANCA7	2110140
BELL	204 204	1181411 118141M	BELL	47	1181062	BLANCA7	2110144
BELL	206	1181502	BELL	47 47	1181063 1181065	BLANCA7	2110148
BELL	206	1181503	BELL	47	1181066	BLANCA7 BLANCA7	2110150 2110154
BELL	206	1181504	BELL	47	1181068	BLANCA7	2110154
BELL	206	1181506	BELL	47	1181069	BLANCA7	2110160
BELL	206	1181508	BELL	47	1181071	BLANCA7	2110162
BELL Bell	206	1181511	BELL	47	1181102	BLANCA7	2110164
BELL	206 206	1181522 1181579	BELL	47	1181104	BLANCA7	2110166
BELL	206	1182107	BELL BELL	47 47	1181106 1181202	BLANCA7	2110168
BELL	206	1182108	BELL	47	1181310	BLANCA7 BLANCA7	2110170 2110172
BELL	212	1181420	BELL	47	2390101	BLANCA7	2110172 21101MA
BELL	214	1182100	BELL	47	2390202	BLANCA7	21101ML
BELL	214	1182105	BELL	47	2390301	BLANCA7	21101N2

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
BLANCA7	21101N7	BOEING727	1384002	BOEING747	1384813
BLANCA7	21101NB	BOEING727	1384003	BOEING747	1384828
BLANCA7	21101NM	BOEING727	1384004	BOEING747	1384866
BLANCA7	21101NX	BOEING727	1384005	BOEING747	1384871
BLANCA7	21101PC	BOEING727	1384006	BOEING747	1384872
BLANCA8	1220801	BOEING727	1384008	BOEING747	1384873
BLANCAPACMKR	1200202	BOEING727	1384009	BOEING747	1384881
BLANCAPACMKR	1200702	BOEING727	138400C	BOEING747	1384892
BLANCASKYRKT	1200602	BOEING727	138400E	BOEING747	1384895
BNORM BN2	1520202	BOEING727	138400F	BOEING747	1384903
BNORM BN2	1520204	BOEING727	138400H	BOEING747	1384920
BNORM BN2	1520205	BOEING727	138400K	BOEING747	1384932
BNORM BN2	1520207	BOEING727	1384010	BOEING75	1380102
BNORM BN2	1520209	BOEING727	1384012	BOEING75	1380104
BNORM BN2	1520210	BOEING727	1384014	BOEING75	1380106
BNORM BN2	1520215	BOEING727	1384016	BOEING75	1380108 1380112
BNORM BN2	1520220	BOEING727	1384017	BOEING75	1380112
BNORM BN2	1520221	BOEING727	1384018	BOEING75 BOEING75	1380118
BNORM BN2	1520226	BOEING727	1384025	BOEING75	1380110
BNORM BN2	1520227	BOEING727	1384029 1384032	BOEING75	1380122
BNORM BN2	1520302 1520350	BOEING727 BOEING727	1384058	BOEING75	1380124
BNORM BN2	7080221	BOEING727	1384059	BOEING75	1380131
BNORM BN2 BNORM BN2	7080221	BOEING727	1384063	BOEING75	1380132
BNORM BN2MK3	1520203	BOEING727	138406N	BOEING75	1380134
ENORM BN2MK3	1520208	BOEING727	1384073	BOEING75	1380136
BOARD XJL1	2320104	BOEING727	1384076	BOEING75	1380137
BOEING100	1381902	BOEING727	1384077	BOEING75	1380138
BOEING107	9420602	BOEING727	1384078	BOEING75	1380140
BOEING107	9420604	BOEING727	1384079	BOEING75	1380142
BOEING234	1385049	BOEING727	138407E	BOEING75	1380144
BOEING307	1381102	BOEING727	138407G	BOEING75	1380146
BOEING42	1385006	BOEING727	138407W	BOEING75	1380148
BOEING42	9420102	BOEING727	1384082	BOEING75	1380150
BOEING42	9420106	BOEING727	1384084	BOEING75	1380152
BOEING707	138360H	BOEING727	138408D	BOEING75	1380154
BOEING707	138 360T	BOEING727	138408F	BOEING757	138 495 9
BOEING707	1383640	BOEING727	138408J	BOEING757	1384962
BOEING707	138 365B	BOEING727	138408W	BOEING757	1384965
BOEING707	1383 65 K	BOEING727	138408X	BOEING757	1384970
BOEING707	1383668	BOEING727	1384101	BOEING767	1385122
BOEING707	138366B	BOEING737	1384412	BOEING767	1385123
BOEING707	138366C	BOEING737	1384435	BOEINGB 17	1380202
BOEING707	138366F	BOEING737	1384453	BOEINGB17	1380204
BOEING707	138366H	BOEING737	1384459	BOEINGC97	138 1604
BOEING707	138366M	BOEING737	138446R	BOEINGC97 BOEINGYL15	138 1605 13808 10
BOEING707	138367A	BOEING737	1384473	BOEINXH47	4090202
BOEING707	138367B	BOEING737	1384479 1384480	BOLKMS 105	5626005
BOEING707 BOEING707	138367D 138367E	BOEING737 BOEING737	1384485	BOLKMS 105	5626006
BOEING707	138367F	BOEING737	1384488	BOLKMS 117	5626010
BOEING707	138367J	BOEING737	138448G	BOLKMS117	5626015
BOEING707	138367N	BOEING737	138448U	BOLKMS209	5626007
BOEING707	1383675	BOEING737	138448V	BOLKOWJR	1400202
BOEING707	138367Y	BOEING737	138448W	BRAER0748	1500248
BOEING707	138368D	BOEING737	1384552	BRAERODH125	1500205
BOEING707	138368H	BOEING737	1384570	BRAERODH125	1500285
BOEING720	1383810	BOEING737	1384582	BRASOVIS28	4490102
BOEING720	1383818	BOEING737	1384585	BRASOVIS29	4490106
BOEING720	1383822	BOEING737	1384610	BRWSTRFLEE10	1462004
BOEING720	1383826	BOEING737	1384611	BRWSTRFLEET1	1461104
BOEING720	1383857	BOEING737	1384670	BRWSTRFLEET2	1461202
BOEING720	1383861	BOEING737	1384671	BRWSTRFLEET2	1461204
BOEING720	1383873	BOEING747	1384802	BRWSTRFLEET7	1461502
BOEING720	1383877	BOEING747	1384807	BRWSTRFLEET?	146 1504
BOEING727	1380420	BOEING747	1384810	BRWSTRFLEET7	1461512

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	<u> FAA</u>	SDR	FAA
BOWSTDEL FETO	1454000				
BRWSTRFLEET8 BRWSTRFLEET8	1461802	CESSNA 172	2072408	CESSNA185	2072818
BRWSTRFLEETS	1461804 1461902	CESSNA 172	2072410	CESSNA185	2072820
BUHL CA3	1650302	CESSNA172	2072412	CESSNA185	2072821
BUHL LA1	1651002	CESSNA172 CESSNA172	2072413	CESSNA188	2073002
BUKER 131	1590104	CESSNA172	2072414 2072418	CESSNA188 CESSNA188	2073004
BUKER 131	1590114	CESSNA172	2072420	CESSNA188	2073005 2073006
BUKER 133	1590326	CESSNA 172	2072421	CESSNA188	2073005
BURNS BA42	05601D3	CESSNA172	2072424	CESSNA188	2073008
BUSHMS2000	0350406	CESSNA172	2072426	CESSNA188	2073010
BUTLERBHAWK CAMAIR480	1720102	CESSNA 172	2072429	CESSNA188	2073011
CAMROND50	1890102 1880114	CESSNA 172	2072430	CESSNA188	2073012
CAMRONMODELN	1880245	CESSNA172 CESSNA172	2072431	CESSNA190	2072902
CAMRONMODELO	1880104	CESSNA172	2072432	CESSNA 195	2073102
CAMRONMODELO	1880106	CESSNA172	2072434 2072436	CESSNA195 CESSNA195	2073106
CAMRONMODELO	1880108	CESSNA172	2072437	CESSNA195	2073108 2073110
CAMRONMODELO	1880110	CESSNA 172	2072438	CESSNA195	2073110
CAMRONMODELO	1880112	CESSNA175	2072502	CESSNA205	2073202
CAMPONMODELO	1880113	CESSNA 175	2072504	CESSNA205	2073204
CAMRONMODELO CAMRONMODELO	1880120	CESSNA 175	2072506	CESSNA206	2073302
CAMRONMODELO	1880122 1880201	CESSNA 175	2072508	CESSNA206	2073304
CAMRONMODELO	1880202	CESSNA177	2073704	CESSNA206	2073306
CAMRONMODELO	1880203	CESSNA 177 CESSNA 177	2073706	CESSNA206	2073308
CAMRONMODELO	1880204	CESSNA177	2073708 2073709	CESSNA206	2073309
CAMRONMODELO	1880205	CESSNA 180	2072602	CESSNA206 CESSNA206	2073310
CAMRONMODELO	1880225	CESSNA 180	2072604	CESSNA206	2073311 2073312
CARMAMM200	1981008	CESSNA180	2072606	CESSNA206	2073312
CASA C212	2410200	CESSNA 180	2072608	CESSNA206	2073316
CASA C212	2410202	CESSNA180	2072610	CESSNA206	2073318
CASA C212 CASA C212	2410204	CESSNA 180	2072612	CESSNA206	2073322
CASA C212	2410302 2410304	CESSNA 180	2072614	CESSNA206	2073324
CCOPTR47BELL	2390303	CESSNA 180	2072616	CESSNA206	2073332
CCOPTR47BELL	2390304	CESSNA180 CESSNA180	2072618	CESSNA206	2073333
CCOPTR47BELL	2390305	CESSNA 180	2072622 2072624	CESSNA206 CESSNA206	2073334
CENTRL26	0180604	CESSNA182	2072702	CESSNA206	2073338 2073340
CESSNA120	2071402	CESSNA 182	2072704	CESSNA206	2073342
CESSNA140	20 1602	CESSNA 182	2072706	CESSNA206	2073344
CESSNA140	2071604	CESSNA 182	2072708	CESSNA206	2073346
CESSNA 150 CESSNA 150	2071802 2071804	CESSNA 182	2072710	CESSNA206	2073348
CESSNA 150	2071804	CESSNA182	2072712	CESSNA206	2073350
CESSNA 150	2071808	CESSNA182	2072714	CESSNA206	2073352
CESSNA 150	2071810	CESSNA 182 CESSNA 182	2072716	CESSNA206	2073353
CESSNA 150	2071812	CESSNA182	2072718 2072722	CESSNA206 CESSNA206	2073356
CESSNA 150	2071814	CESSNA 182	2072724	CESSNA206 CESSNA207	2073357 2073 6 02
CESSNA 150	2071816	CESSNA182	2072726	CESSNA207	2073604
CESSNA 150	2071818	CESSNA182	2072728	CESSNA207	2073612
CESSNA 150	2071820	CESSNA 182	2072730	CESSNA207	2073614
CESSNA 150 CESSNA 150	2071822	CESSNA 182	2072731	CESSNA208	2073702
CESSNA 150	2071824 2071826	CESSNA 182	2072732	CESSNA208	2073703
CESSNA150	2071828	CESSNA 182 CESSNA 182	2072734	CESSNA210	2073402
CESSNA150	2071830	CESSNA 182	2072735	CESSNA210	2073404
CESSNA 150	2071831	CESSNA182	2072736 2075802	CESSNA210	2073406
CESSNA150	2071835	CESSNA182	2075802	CESSNA210 CESSNA210	2073408 2073410
CESSNA150	2071836	CESSNA182	2075814	CESSNA210	2073410
CESSNA 170	2072302	CESSNA182	2075816	CESSNA210	2073412
CESSNA 170	2072304	CESSNA 185	2072802	CESSNA210	2073416
CESSNA170	2072306	CESSNA 185	2072804	CESSNA210	2073418
CESSNA172 CESSNA172	2072202	CESSNA 185	2072806	CESSNA210	2073422
CESSNA 172	2072402 2072404	CESSNA 185	2072808	CESSNA210	2073436
CESSNA172	2072404	CESSNA 185	2072812	CESSNA210	2073432
		CESSNA 185	2072816	CESSNA210	2073436

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	<u>FAA</u>	SDR	FAA	SDR FAA
CESSNA210	2073438	CECCNACCT	2025245	
CESSNA2 10	2073439	CESSNA337 CESSNA337	2075717	COLT 240A 2300180
CESSNA210	2073440	CESSNA337	2075719 2075721	COLT 77A 2000102 COMWTH175 2370402
CESSNA210	2073446	CESSNA337	2075723	COMWTH175 2370402
CESSNA210	2073447	CESSNA337	2075724	COMWTH180 2370504
CESSNA210	2073448	CESSNA337	2075725	COMWTH185 2370602
CESSNA210 CESSNA210	2073449 2073450	CESSNA337	2075726	COMWTH185 2370604
CESSNA210	2073450	CESSNA337 CESSNA337	2075727	COMWTH185 2370608
CESSNA210	2073453	CESSNA337	2075730 2075731	COMWTH190 2370704 COMWTH7000 2371206
CESSNA210	2073454	CESSNA337	2075732	CDMWTH9000 2371422
CESSNA210	2073455	CESSNA337	2075733	CONAERC1 5110102
CESSNA210	2073456	CESSNA340	2076404	CONAERC2 5110202
CESSNA210 CESSNA303	2073459	CESSNA340	2076405	CONAERLA4 2400102
CESSNA305	2073820 2073902	CESSNA401	207590C	CONAERLA4 2400108
CESSNA305	2074002	CESSNA401 CESSNA401	207590D 207590E	CONAERLA4 5110302 CONAERLA4 5110304
CESSNA305	2074003	CESSNA402	207590K	CONAERLA4 5110304 CONAERLA4 5110306
CESSNA305	2074004	CESSNA402	207590M	CONAERLA4 5110310
CESSNA305	2074005	CESSNA402	207590P	CONAERLA4 5110312
CESSNA305 CESSNA305	2074006	CESSNA402	207590R	CONAERLA4 5110320
CESSNA305	2074008 2074014	CESSNA404	2075901	CORCRNGLIDER 2480122
CESSNA305	2074016	CESSNA411 CESSNA411	2075902 2075904	CORCRNGLIDER 2480126
CESSNA305	2074018	CESSNA414	2075907	CUNHAMPT6 2580104 CURTIS22 2620202
CESSNA305	2074028	CESSNA414	2075908	CURTISC46 2622601
CESSNA305	2074030	CESSNA421	2076010	CURTISC46 2622602
CESSNA310	2074202	CESSNA421	2076012	CURTISC46 2622604
CESSNA310 CESSNA310	2074204 2074206	CESSNA421	2076014	CURTISC46 2622608
CESSNA310	2074208	CESSNA421 CESSNA425	2076016	CURTISC46 2622610
CESSNA310	2074210	CESSNA441	2076018 2076020	CURTISC46 2622701 CURTISC46 2622702
CESSNA310	2074212	CESSNA500	2076602	CURTISC46 2622702 CURTISC46 2622708
CESSNA310	2074214	CESSNA500	2076604	CURTISFLGLNG 2620302
CESSNA310 CESSNA310	2074216	CESSNA500	2076606	CURTISUN4D 2620604
CESSNA310	2074218 2074220	CESSNA500	2076607	CURTISUR 2620502
CESSNA310	2074222	CESSNA501 CESSNA650	207 6605 207 6 802	CURTISO52 2622002 CURTISP40 2622202
CESSNA310	2074224	CESSNAAW	2070502	CURTISP40 2622202 CURTISP40 2622203
CESSNA310	2074226	CESSNAT303	2073803	CURTISP40 2622206
CESSNA310	2074228	CESSNAT37	2074321	CURTISROBIN 2620802
CESSNA310 CESSNA310	2074230 2074234	CESSNAT50	2071302	CURTISROBIN 2620806
CESSNA310	2074238	CESSNAT50 CESSNAT50	2071306	CURTISROBIN 2620808
CESSNA310	2074240	CESSNAUC77	2071008 2070702	CURTISROBIN 2620812 CURTISSEDAN 2620904
CESSNA310	2074242	CESSNAUC77	2070802	CURTISSEDAN 2620904 CURTISTRVAIR 2621004
CESSNA310	2074244	CESSNAUC94	2070902	CURTISTRVAIR 2621006
CESSNA310 CESSNA310	2074245	CESSNAUC94	2071002	CURTISTRVAIR 2621010
CESSNA310	2074246 2074502	CESSNAUC94	2071102	CURTISTRVAIR 2621012
CESSNA320	2074504	CHILD S1 CHILD S1	0110100 0110301	CURTISTRVAIR 2621104
CESSNA320	2074506	CHILD S1	0110301	CURTISTRVAIR 2621108 CURTISTRVAIR 2621204
CESSNA320	2074508	CHILD S2	0110201	CURTISTRVAIR 2621302
CESSNA320	2074510	CHILD S2	0110202	CURTISTRVAIR 2621304
CESSNA320 CESSNA320	2074512	CHILD S2	0110304	CURTISTRVAIR 2621308
CESSNA320	2074514 2074516	CLARK 1000	2230102	CURTISTRVAIR 2621402
CESSNA325	2074802	CLARK 12 CNDAIRCL44	2230302 1900102	CURTISTRVAIR 2621404
CESSNA335	2075601	CNDAIRCL600	1900102	CURTISTRVAIR 2621502 CURTISTRVAIR 2621506
CESSNA336	2075602	CNDAIRCL600	1900302	CURTISTRVAIR 2621508
CESSNA337	2075702	CNTRAR101	1990102	CURTISTRVAIR 2621602
CESSNA337 CESSNA337	2075704	CNTRAR101	1990104	CURTISTRVAIR 2621604
CESSNA337	2075706 2075707	COAIRE3C	2350102	CURTISTRVAIR 2621606
CESSNA337	2075712	COAIRE3C COAIRE3C	2350104 235010 6	CURTISTRVAIR 2621702
CESSNA337	2075714	COAIRESC	2350106	CURTISTRVAIR 2621704 CURTISTRVAIR 2621802
		- · - · - · - ·		JUNE 2011002

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

<u>s</u>	DR	FAA	<u>S</u> 1	DR	FAA	SD	R	FAA
CHETT	STRVAIR	2621804	DART	G	2700106	DOLLO	nca	2024467
	STRVAIR	2621806	DART	G	2700106 2700108	DOUG	DC3 DC3	3021467 3021468
	STRVAIR	2621808	DAVIS		2740504	DOUG	DC3	3021472
CURTI	STRVAIR	2621810	DAVIS		2740506	DOUG	DC3	3021474
CURTI	STRVAIR	2621814	DAVIS	D1	2740508	DOUG	DC3	3021478
	STRVAIR	2621818	DAVIS	٧3	2743002	DOUG	DC3	3021481
	STRVAIR	2621820	DHAV	DH112	2800421	DOUG	DC4	3021502
	STRVAIR STRVAIR	2621822	DHAV	DH82	2801000	DOUG	DC4	3021506
	STRVAIR	2621824 2621826	DHAV DHAV	DHC1 DHC1	2801702 2801704	DOUG	DC4 DC4	3021510
	STRVAIR	262 1830	DHAV	DHC 1	2801704	DOUG	DC4	3021516 3021518
	STRVAIR	262 1902	DHAV	DHC 1	2801714	DOUG	DC4	3021512
CURTI	STRVAIR	2621904	DHAV	DHC 1	2801716	DOUG	DC4	3021524
	STRVAIR	2621908	DHAV	DHC 1	2801736	DOUG	DC4	3021528
CVAC	22	2423302	DHAV	DHC 1	2801738	DOUG	DC4	3021530
CVAC	22 240	2423304	DHAV	DHC 1	2801739	DOUG	DC4	3021534
CVAC	240	2422601 2422602	DHAV	DHC2	2800102	DOUG	DC4	3021536
CVAC	240	2422604	DHAV DHAV	DHC2 DHC2	2800104 2800105	DOUG	DC6 DC6	3021702
CVAC	240	2422608	DHAV	DHC2	2800103	DOUG	DC6	3021706 3021710
CVAC	240	2422610	DHAV	DHC2	2800108	DOUG	DC6	3021712
CVAC	240	2422612	DHAV	DHC2	2800109	DOUG	DC7	3021802
CVAC	240	2422628	DHAV	DHC2	2801830	DOUG	DC7	3021804
CVAC	240	2422633	DHAV	DHC3	2800202	DOUG	DC7	3021806
CVAC	240 240	2422642	DHAV	DHC4	2800302	DOUG	DC8	3021906
CVAC	240	2422844 2422647	DHAV DHAV	DHC4	2800304	DOUG	DC8	3021908
CVAC	240	242264A	DHAV	DHC6 DHC7	2802606 2802708	DOUG	DC8 DC8	3021912 302191D
CVAC	30	2423202	DHAV	DHC7	2802710	DOUG	DC8	3021910
CVAC	30	2423204	DHAV	DHC8	2809002	DOUG	DC8	3021922
CVAC	340	2422704	DHAVX		2801002	DOUG	DC8	3021924
CVAC	340	242270A	DHAVX		2801015	DOUG	DC8	3021926
CVAC	340	2422742	DOMIC		2970102	DOUG	DC8	3021927
CVAC	440 440	2422902 2422904	DORNE		2999006	DOUG	DC8	3021928
CVAC	B24	2422502		RD0228 RD0228	2992020 2995000	DOUG	DC8 DC8	302192F 302192H
CVAC	BT13	2420202	DORNE	-	2990704	DOUG	DC8	302192M
CVAC	BT13	2420204	DORNE		2990721	DOUG	DC8	3021952
CVAC	BT13	2420206	DORNE	RD028	2990102	DOUG	DC8	302195B
CVAC	BT 13	2420208	DORNE		2990202	DOUG	DC8	3021970
CVAC	BT13	2420222	DORNEI		2991404	DOUG	DC8	302197B
CVAC	BT13 BT13	2420224 2420228	DOUG	A20	3020302	DOUG	DC8	302198A
CVAC	BT13	2420230	DOUG DOUG	A20 A24	3020306 3020406	DOUG DOUG	DC8 DC8	302198B 302198F
CVAC	BT 15	2420302	DOUG	A26	3020504	DOUG	DC8	302198F
CVAC	BT 15	2420312	DOUG	A26	3020506	DOUG	DC8	302199B
CVAC	L13	2420702	DOUG	B23	3020702	DOUG	DC8	302199F
CVAC	L13	2420704	DOUG	B26	3020514	DOUG	DC9	3022002
CVAC	L13	2420706	DOUG	DC10	3022110	DOUG	DC9	3022034
CVAC	LB30 P4Y	2420804 2421102	DOUG	DC10	3022111	DOUG	DC9	3022036
CVAC	PBY5	2421208	DOUG	DC10 DC10	3022118	DOUG DOUG	DC9	3022037
CVAC	PBY5	2421218	DOUG	DC 10	3023501 3023503	DOUG	DC9	302203H 302203K
CVAC	PBY5	2421230	DOUG	DC2	3021302	DOUG	DC9	3022051
CVAC	PBY6	2421302	DOUG	DC3	3021401	DOUG	DC9	3022065
CVAC	STC580	2422801	DOUG	DC3	3021404	DOUG	DC9	3022066
CVAC	STC580	2422802	DOUG	DC3	3021424	DOUG	DC9	302206A
CVAC	STC580 STC580	2422804 2422806	DOUG	DC3	3021433	DOUG	DC9	302206C
CVAC	STC580	2422806	DOUG	DC3	3021440	DOUG	DC9	302207A
CVAC	STC580	2423001	DOUG	DC3	3021454 3021457	DOUG DOUG	DC9	302207N 3022081
CVAC	STC600	2422660	DOUG	DC3	3021457	DOUG	DC9	3022081
CVAC	STC640	2422814	DOUG	DC3	3021460	DOUG	DOLPHN	3020104
CVAC	V1A	2421702	DOUG	DC3	3021461		SSKYLK3	3160502
DART	G	2700102	DOUG	DC3	3021462	DURMO		3200502
DART	G	2700104	DOUG	DC3	3021466	EAA	SA9	8650747

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
EAGLE DW	3230203	FRCHLD24	3370602	GRTLKS2T1	3910102
EAGLEBAX7	3240107	FRCHLD24	3370608	GRTLKS2T1	3910104
EAGLEBC7	3240207	FRCHLD24	3370614	GRTLKS2T1	3910106
EIRVON2O	5760102	FRCHLD24	3370620	GRTLKS2T1	3910107
EIRVON2O	5760104	FRCHLD24	3370626	GRTLKS2T1	3910108
EIRVON2O	5760202	FRCHLD24	3370628	GRUMANAF2S	3950104
EIRVON2O	5760204	FRCHLD71	3370802	GRUMANF6F	3950602
EIRVON2O	5760206	FRCHLDC 119	3372102	GRUMANF6F	3950614
EIRVON2O	5760207	FRCHLDC 119	3372106	GRUMANF6	395069G
EMAIR MA1	3280103	FRCHLDC119	3372108	GRUMANF7F	3950704
EMAIR MA1	6070102	FRCHLDC123	3372202	GRUMANF8F	3950801
EMB 110	3260122	FRCHLDC82	3372002	GRUMANF8F	3950802
EMB 110	3260124	FRCHLDC82	3372004	GRUMANF9	3950905
EMB 120	3260201	FRCHLDF27	3373002	GRUMANFM	3950102
ENSTRM280	3300510	FRCHLDF27	3373006	GRUMANG 134	3951000
ENSTRMF28 ENSTRMF28	3300404 330040 6	FRCHLDF27	3373008	GRUMANG44	3951602
ENSTRMF28	3300408	FRCHLDF27 FRCHLDF45	3373016 3371202	GRUMANG73 GRUMANSA16	3951902 3950404
ENSTRMF28	3300407	FRCHLDFC2	3371202	GRUMANSA 16	3950404
ENSTRMF28	3300430	FRCHLDFH1100	4361415	GRUMANSA 16	3950406
ENSTRMF28	3300502	FRCHLDFH227	3373042	GRUMANSA 16	3950410
ENSTRMF28	3300505	FRCHLDKR31	3371402	GRUMANSA16	3950412
ENSTRMF28	3300506	FRCHLDKR34	3371504	GRUMANSA 16	3950413
ENSTRMF28	3300550	FRCHLDKR34	3371506	GRUMANSA 16	3950414
ENTWICPHEBUS	1403014	FRCHLDM62	337 1604	GRUMANSA 16T	3950407
ENTWICPHEBUS	3321206	FRCHLDM62	337 160 6	GRUMANSA 16T	3950408
ENTWICPHEBUS	3321210	FRCHLDM62	3371608	GRUMANTS2	3951102
EVNAIR4500	3340104	FRCHLDM62	3371618	GRUMAVAA1	0630820
EVNAIR4500	3340106	FRCHLDM62	3371620	GRUMAVAA1	3960100
FARZWKDIAMAT	3550802	FRCHLDM62	337 1622	GRUMAVAA1	3960103
FARZWKDIAMAT	3550806	FRCHLDM62	3371624	GRUMAVAA5	3960104
FCKWLF44J FLEET 16B	3540102	FRCHLDM62	3371626	GRUMAVAA5	3960105
FLTCHR24	3480502 3530204	FRCHLDM62	3371628 3371630	GRUMAVG1159	3960302
FLTCHRFD25	3530204	FRCHLDM62 FRCHLDM62	3371632	GRUMAVG164 GRUMAVG164	3952702 3952801
FLYGSTWEIHE	3802219	FRCHLDM62	3371640	GRUMAVG164	3952802
FOKKERF27	4990614	FRCHLDM62	3374004	GRUMAVG 164	3952803
FOKKERF27	4990629	FRCHLDM62	3374006	GRUMAVG164	3952804
FOKKERF28	4990808	FUJI LM1	3730110	GRUMAVG164	3960201
FOMOCO4AT	3590102	FUNK FUNKC	3720202	GRUMAVG164	3960202
FOMOCO4AT	3590104	GARCIATROJAN	3270102	GRUMAVG164	3960203
FOMOCO5AT	3590202	GEM 205	0380102	GRUMAVG164	3960204
FOMOCO5AT	3590204	GENBALAX6	3760102	GRUMAVG164	3979904
FRANK 90	3680102	GENBALAX6	3760202	GRUMAVG21	3951202
FRCHLD21	3371302	GENBALSPRINT	3760402	GRUMAVG21	3951204
FRCHLD22	3370104	GLASFL201	3800344	GRUMAVG21	3951214
FRCHLD22 FRCHLD22	3370108 3370110	GLASFL304	3800347	GRUMAVG21 GRUMAVG89	3951216
FRCHLD22	3370110	GLASFLBS1 GLASFLH301	38003FB 3800335	GRUMAVJ2F	3951006 3950208
FRCHLD22	3370114	GLASFLH301	3800335	GRUMAVTBM	3950306
FRCHLD22	3370116	GLASFLH301	3800337	GRUMAVTBM	3950308
FRCHLD24	3370202	GLASFLH301	3800341	GRUMAVTBM	3950310
FRCHLD24	3370204	GLASFLKESTRL	3800343	GULSTM112	0144701
FRCHLD24	3370206	GLASFLLIBELL	3800346	GULSTM112	7630302
FRCHLD24	3370208	GOLDENCHIEF	3840102	GULSTM112	7630306
FRCHLD24	3370216	GOODYR813	3870148	GULSTM112	7630307
FRCHLD24	3370220	GOODYRFG1D	3870512	GULSTM112	7630314
FRCHLD24	3370302	GOODYRGZ20	3870220	GULSTM112	7630315
FRCHLD24	3370402	GOODYRS30	3870139	GULSTM112	7630316
FRCHLD24	3370408	GOODYRTZ	3870218	GULSTM500	0141102
FRCHLD24	3370414	GOVT N22	3880102	GULSTM500	0141104
FRCHLD24 FRCHLD24	3370502 3370508	GROB 103CAT	1660202	GULSTM500	0141106
FRCHLD24	3370508	GROB 109 GROB 109	1660204	GULSTM500	0141107
FRCHLD24	3370516	GROB ASTIR	1660205 1660104	GULSTM500 GULSTM520	0141108 0141202
FRCHLD24	3370520	GRTLKS2T1	3910101	GULSTM520	0141202
			5510101		3171702

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	<u>FAA</u>	SDR	FAA
GULSTM560	0141404	HELIO H295	4301104	HMK61 AUT 106	2800200
GULSTM560	0141406	HELIO H391	4300102	HWKSLYDH106 HWKSLYDH114	2800308 2800506
GULSTM680	0141408	HELIO H391	4300106	HWKSLYDH125	1500308
GULSTM680	0141602	HELIO H395	4300202	HWKSLYDH125	4210101
GULSTM880	0141604	HELIO H395	4300206	HWKSLYDH125	4210112
GULSTM680 GULSTM680	0141606	HELIO H700	4300400	HWKSLYDH125	4230106
GULSTM680	0141608 0141610	HELIO H800	4300500	HWKSLYDH125	4230110
GULSTM680	0141611	HELIO HST550 HELIO HST550	4301002 4301006	HWKSLYDH125 HWKSLYDH125	4230126
GULSTM680	0141612	HILLERFH1100	3376502	HWKSLYDH125	4230138 423013M
GULSTM680	0141802	HILLERUH12	4360102	HWKSLYDH125	423013F
GULSTM680	7630513	HILLERUH12	4360103	HWKSLYDH125	4230140
GULSTM680TP	0141712	HILLERUH12	4360104	HWKSLYDH125	4230158
GULSTM680TP GULSTM680TP	0141714 0141716	HILLERUH12	4360105	HWKSLYDH125	4230160
GULSTM680TP	0141718	HILLERUH12 HILLERUH12	4360110	HYNES 305	1440602
GULSTM69OTC	3970404	HILLERUH12	4360113 4360114	HYNES 82 Hynes 82	1440502
GULSTM690TP	0141720	HILLERUH12	4360115	HYNES B2	1440504 1440506
GULSTM690TP	0141722	HILLERUH12	4360116	INDAERP 166	6960202
GULSTM690TP	3970405	HILLERUH12	4360117	INLANDR400	4550502
GULSTM690TP	3970410	HILLERUH12	4360118	INLANDS300	4551002
GULSTM690TP GULSTM690TP	3970411 3970610	HILLERUH12	4360119	INLANDW500	4552002
GULSTM69OTP	7630515	HILLERUH12 HILLERUH12	4360120 4360121	INTRCP200	5650304
GULSTM690TP	7630516	HILLERUH12	4360121	INTRCP200 INTRCP200	5650306 5650308
GULSTM690TP	7630517	HILLERUH12	4360124	INTRCP200	5650308 5650310
GULSTM690TP	7630518	HILLERUH12	4360125	ISRAEL 101	4500204
GULSTM690TP	7630519	HILLERUH12	4360126	ISRAEL1121	0142002
GULSTMAA1	0630610	HILLERUH12	4360128	ISRAEL1121	0142006
GULSTMAA1 GULSTMAA5	0630710 0631410	HILLERUH12	4360130	ISRAEL1121	0142010
GULSTMAAS	3960106	HILLERUH12 HILLERUH12	4360131	ISRAEL1123	4500101
GULSTMG1159	3953505	HILLERUH12	4360132 4360135	ISRAEL1124 ISRAEL1124	4500102 4500103
GULSTMG1159	3953535	HILLERUH12	4360809	JAMISNU1	4650502
GULSTMG1159	3970109	HILLERYROE1	4362402	JAMISNU2	4651004
GULSTMG159	3952202	HNLYPGHP137	4130402	JBMSTRDGA11	4690302
GULSTMG44 GULSTMG44	3951502	HOFFLUDIMONA	4670101	JBMSTRDGA15	4690502
GULSTMG73	3951508 3951802	HOWARD500	4390102	JBMSTRDGA15	4690506
GULSTMGA7	3960401	HSPAVNHA1112 HUGHES269	4380102 4470402	JBMSTRDGA15 JBMSTRDGA18	4690516
H-1	1181409	HUGHES269	4470403	JBMSTRDGA8	4690604 4690102
H13/HTL	1180806	HUGHES269	4470404	KAISERF5	4762002
H13/HTL	1181007	HUGHES269	4470502	KAMAN K600	4800702
H13/HTL	1181585	HUGHES269	4470504	KAMAN K600	4800704
H19/45 H19/45	8141615 814161E	HUGHES269	4471004	KAMAN K600	4800802
H23/HTE	4360109	HUGHES369 HUGHES369	4470702 4470704	KAMAN K600 KAMAN K600	4800803
H23/HTE	4360111	HUGHES369	4470706	KAWSKIKV107	4800805 4820101
H23/HTE	4360123	HUGHES369	4470707	KELLETKD1	4850106
H23/HTE	4362303	HUGHES369	4470708	KINNERB	4940202
H23/HTE	4362305	HUGHES369	4470718	KINNERB	4940204
H34/55 H34/55	8141810 8141813	HUGHES369	4470720	KINNERR	4940102
H34/55	8141819	HUGHES369 HUGHES369	4470722 4470728	LAIKFN10 LAIKFNBA100	5090204
H34/55	8141823	HUGHES369	4470730	LAIRD LC	50901FB 5070102
H37	8142302	HUGHES369	4470731	LAIRD LC	5070102
HAMFLUHFB320	4071204	HUGHES369	4470806	LAIRD LCB	5070110
HARTMNOWSM	4200102	HUGHES500	4470805	LAISTRLP 15	5100108
HEAD AX888 Heath Cna40	05637T7	HWKSLY80A	2800902	LAISTRLP 15	5100202
HEATH LNB4	4250102 4250202	HWKSLYDH104	2800402	LAISTRLP15	5100203
HELIO H250	4300302	HWKSLYDH104 HWKSLYDH104	2800404 2800406	LAISTRLP46	5100101
HELIO H295	4300802	HWKSLYDH104	2800406	LAISTRLP49 LEAR 23	5100102 5170102
HELIO H295	4300803	HWKSLYDH104	2800412	LEAR 24	5170302
HELIO H295	4301101	HWKSLYDH104	2800414	LEAR 24	5170304
HELIO H295	4301102	HWKSLYDH104	2800418	LEAR 24	5170306

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
LEAR 24	5170307	LKHEEDYO3A	5269501	MNCDUP90	5810107
LEAR 24	5170310	LKINTL402	5263406	MNCOUP90	5810110
LEAR 24	5170311	LUSCMB1	5350102	MNMITEM 18	5870102
LEAR 24	5170316	LUSCMB4	5350202	MNMITEM 18	5870104
LEAR 24	5170317	LUSCOM8	8190102	MNMITEM 18	5870106
LEAR 25	5170506	LUSCOM8	8 190 104	MNMITEM 18	5870108
LEAR 25	5170509	LUSCOM8	8190106	MNSLNRMS760	5910102
LEAR 25 Lear 25	5170511 5170512	LUSCOM8	8190108	MNSLNRMS760 MODFD47	5910106 1180847
LEAR 25	5170513 5170514	LUSCOM8	8190110 8190112	MODFD47	118084F
LEAR 28	5170528	LUSCOM8	8190114	MODFD47	1 18 103H
LEAR 28	5170529	LUSCOM8	8190116	MODFD47	1181067
LEAR 35	5170600	LUSCOM8	8190118	MODFD47	1181074
LEAR 35	5170601	LUSCOM8	8190120	MODFD47	1181306
LEAR 35	5170602	LUSCOM8	8190122	MODFDUH12	4360601
LEAR 35	5170603	LUSCOM8	8190124	MODFDUH12	4360701
LEAR 55	5170702	LUSCOM8	8190126	MODFDUH 12	4360702
LET L13 LKHEED10	1360306	LUSCOM8	8190128	MODEDUH12	4360704
LKHEED10	5261302 5261314	LUSCOM8	8 190 130 8 190 132	MODFDUH 12 MODFDUH 12	4360801 4360810
LKHEED1011	5265010	LUSCOM8	8190154	MODFDUH 12	4361101
LKHEED1011	5265020	MACCHIAL60	5400106	MODFDUH12	4361301
LKHEED1049	5262116	MACCHI AL60	5400108	MODFDUH12	4361501
LKHEED1049	5262118	MAEL BA42	5430102	MOONEYM20	5870202
LKHEED1049	5262121	MARTIN202	5450602	MOONEYM20	5870204
LKHEED1049	5262131	MARTIN404	5450702	MOONEYM20	5870206
LKHEED1049	5262140	MAULE M4	5460102	MOONEYM20	5870208
LKHEED12A	5261402	MAULE M4	5460104	MOONEYM20	5870210
LKHEED1329	5263102	MAULE M4	5460105	MOONEYM20	5870212
LKHEED1329 LKHEED1329	5263106 5263108	MAULE M4	5460106 5460108	MOONEYM20 MOONEYM20	5870214
LKHEED1329	5263125	MAULE M4 Maule M4	5460108 5460112	MOONEYM20	5870219 5870220
LKHEED1649	5262204	MAULE M4	5460114	MOONEYM20	5870308
LKHEED18	5261602	MAULE M4	5460128	MOONEYM20	5870312
LKHEED18	5261624	MAULE M4	5460132	MOONEYM20	5870314
LKHEED18	5261634	MAULE M5	5460133	MOONEYM20	5870601
LKHEED18	5261640	MAULE M5	5460134	MOONEYM20	5870605
LKHEED18	5261642	MAULE M5	5460135	MOONEYM22	5870402
LKHEED188 LKHEED188	5262602 5262604	MAULE MS	5460204	MOONEYM30	5872030
LKHEED286	5263802	MAULE M6 MAULE M6	5460139 5460160	MORISY2000 MOTH 60	5940102 6000102
LKHEED300	5264504	MAULE M7	5460170	MOTH 60	6000102
LKHEED382	5264104	MAULE MX7	5460180	MRCHTIF260	8121206
LKHEED382	526413U	MAULE MX7	5460185	MRCHTIS205	8120412
LKHEED382	526414U	MCBEMSLARK95	4331020	MTSBSIMU2	5780404
LKHEED49	5261702	MCBEMSLARK95	5160202	MTSBSIMU2	5780405
LKHEED49	5262002	MCKINNG21	5550202	MTSBSIMU2	5780406
LKHEED49	5262004	MCKINNG21T	5550105	MTSBSIMU2	5780407
LKHEED49	5262008	MCKINNG21T	5550120	MTSBSIMU2	5780408
LKHEEDP2V LKHEEDP2V	5260110 5260112	MCLISHFUNKB	5480102 5480104	MTSBSIMU2	5780409
LKHEEDP2V	5269601	MCLISHFUNKB MCLISHFUNKB	5480108	MTSBSIMU2 MTSBSIMU2	5780410 5780411
LKHEEDP38	5260201	MCLISHFUNKB	5480202	MTSBSIMU2	5780411
LKHEEDP38	5260203	MCLISHFUNKB	5480204	MTSBSIMU2	5780413
LKHEEDP38	5260204	MCLISHFUNKB	5480208	MTSBSIMU2	5780414
LKHEEDP38	5260205	MEYERSMAC145	5650104	MTSBSIMU300	5780602
LKHEEDP38	5260206	MEYERSOTW	5650202	MTSBSIMU300	5781300
LKHEEDP38	5260207	MEYERSOTW	5650206	MULTECD 16	9230602
LKHEEDP38	5260214	MEYERSOTW	5650208	MULTECD 16	9230604
LKHEEDPV1 LKHEEDPV1	5260102 5260106	MILLERUT1	5720102	MULTECD16	9230606
LKHEEDT33	5260106 5260401	MITCHL101 MITCHL101	2000102 2000104	MULTECD16 MULTECD16	9230608 9230610
LKHEEDT33	5260402	MNCOUP110	5810202	MULTECD16	9230610
LKHEEDT33	5260406	MNCOUP 1 10	5810204	NAMER A36	6400102
LKHEEDVEGA 1	5261002	MNCOUP90	5810102	NAMER B25	6400702
LKHEEDVEGA5	5261202	MNCOUP90	5810104	NAMER B25	6400704

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA_
NAMER B25	6400705	NAVIONNAVION	6150162	PIGMANREARWN	7070308
NAMER B25	6400708	NAVIONNAVION	6150166	PILATSB4	7090103
NAMER B25	6400710	NAVIONNAVION	6150170	PILATS84	7090104
NAMER B25	6400712	NAVIONNAVION	6150172	PILATSPC6	3375014
NAMER B25	6400714	NAVIONNAVION	6150174	PILATSPC6 PILATSPC6	7090102 7090114
NAMER B25	6400718 6402301	NAVIONNAVION NELSONBB1	6150178 6200102	PILATSPC6	7090112
NAMER F51 NAMER F51	6402302	NICBEZ8G	6290202	PILATSPC6T	3375011
NAMER F51	6402303	NIHON YS11	6310406	PILATSPC6T	7090202
NAMER F51	6402304	NIHON YS11	6310416	PILATSPCET	7090210
NAMER F51	6402306	NIHON YS11	6310420	PILATSPC7	7090401
NAMER F51	6402307	NOORDNUC64	6330204	PINAIRSUPERV	1100102
NAMER F51	6402308	NORD 3202	6383202	PIPER 600 PIPER 600	7106001 7106010
NAMER F51	6402309	NORD SV4 NORD SV4	6383006 8470102	PIPER 600	7106010
NAMER F82 Namer F86	6401522 6401714	NORTRPT38	6458005	PIPER 600	7106014
NAMER NA260	6400452	NORWST35	6480102	PIPER 600	7106015
NAMER NA260	6402502	NORWST35	6480104	PIPER 600	7106023
NAMER NA260	6402504	NORWST35	6480108	PIPER 600	8360607
NAMER NA260	6402505	NORWST35	6480126	PIPER E2	7100302
NAMER NA260	6402506	NORWST40	6480110	PIPER F2 PIPER J2	7100304 7100402
NAMER 047	6402202	NORWST50	6480114 6480116	PIPER UZ	7100501
NAMER P64 Namer T6	6402408 1922828	NORWST65 NORWST65	6480118	PIPER J3	7100502
NAMER TO	6400402	NORWST65	6480122	PIPER J3	7100506
NAMER TO	6400404	NORWST65	6480124	PIPER J3	7100508
NAMER TO	6400405	NORWSTEAGLE	7680120	PIPER J3	7100510
NAMER T6	6400406	OBERNRMG23SL	3801049	PIPER J3	7100511
NAMER TO	6400407	ORLHELH19	8141608	PIPER J3	7100512
NAMER TO	6400410	ORLHELH19	8141609 8141610	PIPER J3 PIPER J3	7100514 7100516
NAMER T6 NAMER T6	6400412 6400414	ORLHELH19 ORLHELH19	8141612	PIPER J3	7100518
NAMER TO	6400415	ORLHELH19	8141614	PIPER J3	7100519
NAMER TO	6400416	ORLHELH19	8141616	PIPER J3	7100520
NAMER TG	6400417	ORLHELH19	8141618	PIPER J3	7100522
NAMER TO	6400418	ORLHELH19	814161G	PIPER J3	7100526
NAMER TE	6400419	ORLHELH19	814161J	PIPER J3 PIPER J3	7100 52 8 7100 52 T
NAMER T6 NAMER T6	6400420 6400422	ORLHELS58 ORLHELS58	8141812 8141818	PIPER J3	7100527
NAMER TO	6400423	OTHEXMILPIST	8140102	PIPER J3	7100536
NAMER TO	6400424	OTHEXMILPIST	8140304	PIPER J3	7100542
NAMER TO	6400426	OTHEXMILPIST	8141106	PIPER J3	7100546
NAMER T6	6400430	OTHEXMILTURB	1385064	PIPER J3	7100550
NAMER TO	6400431	OTHEXMILTURB	4470904	PIPER J3	7100552 7101102
NAMER TO	6400432	OTHEXMILTURB OTHEXMILTURB	447090 5 4800708	PIPER J3 PIPER J3	7101102
NAMER T6 NAMER T6	6400434 6400436	PARKS P1T	6770102	PIPER J4	7100602
NAMER TO	6400441	PARMNTCABAIR	6750102	PIPER J4	7100604
NAMER TO	6400442	PARTENP66	6780101	PIPER J4	7100605
NARDI FN333	6080102	PARTENP68	6780105	PIPER J4	7100606
NATBAL752	6113310	PARTENP68	6780106	PIPER J4	7100608
NATBAL752	6113312	PASPEDW1	6790102 5740103	PIPER J4 PIPER J4	7100610 7100614
NATBAL752 NATBAL752	6113317 6113320	PDMILRY1S PECOCKPUC	5740102 4160204	PIPER J5	7100202
NAVAL NON	6120202	PERTH BIRD	6840122	PIPER J5	7100702
NAVIONNAVION	6150106	PERTH BIRD	6840126	PIPER J5	7100706
NAVIONNAVION	6150108	PERTH BIRD	6840132	PIPER J5	7100708
NAVIONNAVION	6150110	PHESNTH10	6880102	PIPER J5	7100712
NAVIONNAVION	6150118	PIAGIOP136	6960102	PIPER L14	7100902 7101202
NAVIONNAVION	6150132	PIAGIOP136	6960104 6960106	PIPER PA12 PIPER PA12	7101202
NAVIONNAVION NAVIONNAVION	6150134 6150136	PIAGIOP136 PIASEXHUP2	6980320	PIPER PA12	7101204
NAVIONNAVION	6150140	PICARDA5	7001216	PIPER PA15	7101502
NAVIONNAVION	6150142	PICARDAX6	7001218	PIPER PA16	7101602
NAVIONNAVION	6150148	PIGMANREARWN	7070104	PIPER PA17	7101702
NAVIONNAVION	6150160	PIGMANREARWN	7070302	PIPER PA18	7101802

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	PAA_	SDR	PAA _	SDR	FAA_
PIPER PA18	7101804	PIPER PA28	7102816	RAVEN S77	7480650
PIPER PA18	7101806	PIPER PA28	7102817	RAWDONT 1	7500102 7530110
PIPER PA18 PIPER PA18	7101808 7101809	PIPER PA28 PIPER PA28	7102818 7102819	REIMS 150 REIMS 150	7530118
PIPER PA18	7101812	PIPER PA28	7102830	REIMS 150	7530120
PIPER PA18	7101813	PIPER PASO	7103002	REIMS 150	7530134
PIPER PA18	7101814	PIPER PA30	7103902	REIMS 172	7530136
PIPER PA18	7101815	PIPER PA31	7103102	REIMS 172	7530139
PIPER PA18	7101816	PIPER PA31	7103104	REIMS 172	7530203
PIPER PA18	7101818	PIPER PA31	7103105	REIMS 172	7530204
PIPER PA18 PIPER PA18	7101820 7101822	PIPER PA31 PIPER PA31	7103110 7103111	REIMS 172 REIMS 172	7530206 7530207
PIPER PA18	7101824	PIPER PAST	7103111	REIMS 172	7530209
PIPER PA18	7101826	PIPER PAS1T	7103124	REIMS 172	7530210
PIPER PA18	7101828	PIPER PA31T	7103126	REIMS 337	7535716
PIPER PA18	7101830	PIPER PA31T	7103127	REIMS 337	7535719
PIPER PA18	7101832	PIPER PA31T	7103128	REIMS 337	7535726
PIPER PA18	7101834	PIPER PA32	7103206	REPBLCP47 RHNFLURW3	7570405
PIPER PA18 PIPER PA18	710183 6 7101837	PIPER PA32 PIPER PA32	7103207 710320 9	RKWELL500	7600504 7630410
PIPER PA18	7101838	PIPER PA32	7103203	RKWELL700	7630520
PIPER PA18	7101902	PIPER PA32	7103212	RKWELLNA265	6402608
PIPER PA18	7101904	PIPER PA32	7103213	RKWELLNA265	6402612
PIPER PA20	7102002	PIPER PA32	7103214	RKWELLNA265	6402614
PIPER PA20	7102004	PIPER PA32	7103215	RKWELLNA265	5402618
PIPER PA20	7102006	PIPER PA32	7103216	RKWELLNA265	7630101
PIPER PA20 PIPER PA20	7102010 7102012	PIPER PA32 PIPER PA32	7103218 7103220	RKWELLNA265 RKWELLNA265	7630104 7630106
PIPER PA22	7102012	PIPER PA34	7103220	RKWELLNA265	7630100
PIPER PA22	7102204	PIPER PA34	7103406	RKWELLNA265	7630108
PIPER PA22	7102206	PIPER PA34	7103420	ROBSINR22	7640102
PIPER PA22	7102208	PIPER PA36	7103610	ROBSINR22	7640104
PIPER PA22	7102210	PIPER PA36	7103612	ROLSCHLS	3801206
PIPER PA22 PIPER PA22	7102212 7102214	PIPER PA36	7103620	ROLSCHLS ROLSCHLS	3801208 3801211
PIPER PA22	7102214	PIPER PA38 PIPER PA42	7103812 7104202	ROLSCHLS	3801211
PIPER PA23	7102302	PIPER PA42	7104212	ROLSCHLS	3801250
PIPER PA23	7102303	PIPER PA42	7104225	ROOS 129	7680106
PIPER PA23	7102304	PIPER PA44	7104402	ROOS 1928	7680204
PIPER PA23	7102305	PIPER PA44	7104404	ROOS A1	7680102
PIPER PA23	7102306 7102308	PIPER PA46	7104605	ROOS A1 ROOS PT	7680104 7680312
PIPER PA23 PIPER PA23	7102308	PIPER T1040 PIPER TG8	7105101 7100102	ROSE A1	7710102
PIPER PA23	710231	PIRTLEROC185	7140107	RYAN SCW	7830302
PIPER PA24	7102402	PIRTLEROC185	7140189	RYAN ST3	7830502
PIPER PA24	7102403	PITCANPA4	7180102	RYAN ST3	7830504
PIPER PA24	7102404	PITCANPA5	7180202	RYAN STA	7830402
PIPER PA24	7102406	PITCANPA6	7180302	RYAN STA	7030404
PIPER PA24 PIPER PA24	7102408 7102409	PITCANPA7 PITCANPA7	7180402 7180406	RYANARB Ryanarb	7840102 7840202
PIPER PA25	7102502	POST A	7280102	SAAB SF340	7850100
PIPER PA25	7102504	PRATT PRG1	7300102	SCBFLG111	3801381
PIPER PA25	7102508	PRATT PRG1	7300106	SCBFLGBERGFK	3801315
PIPER PA28	7102802	PROPJT200	0140302	SCBFLGSF25	3801325
PIPER PA28	7102803	PROPUT200	0140312	SCBFLGSF27	380135V
PIPER PA28 PIPER PA28	7102804 710280 5	PROPJT200 PROPJT400	0140314 4560404	SCBFLGSF28 SCHLER13	380135X 38015GS
PIPER PA28	7102805	RAVEN MG1000	7483202	SCHLERASK 14	38015GW
PIPER PA28	7102807	RAVEN RX6	7480502	SCHLERASK21	38015GY
PIPER PA28	7102808	RAVEN S40	7480104	SCHLERASW12	38015HR
PIPER PA28	7102809	RAVEN S50	05604XW	SCHLERASW15	38015H2
PIPER PA28	7102810	RAVEN S50	7480204	SCHLERASW15	38015HZ
PIPER PA28	7102811	RAVEN SSS	7480402	SCHLERASW17	3801507
PIPER PA28 PIPER PA28	7102813 7102814	RAVEN S60 RAVEN S60	7480606 7480610	SCHLERASW19 SCHLERASW19	3801505 3801508
PIPER PA28	7102815	RAVEN S66	7480610	SCHLERASW20	3801503
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TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
SCHLERASW20	3801506	SKRSKYS55	8141602	SNIAS SA341	8680610
SCHLERII	3801581	SKRSKYS55	8141603	SNIAS SE313	8680502
SCHLERK	3801551	SKRSKYS55	8141604	SOCATAMS880	5910304
SCHLERK2K7	3801554	SKRSKYS55	8141606	SOCATAMS893	8402838
SCHLERK8	3801559	SKRSKYS55	8141800	SOCATAMS894	8402842
SCHLERK8	3801563	SKRSKYS58	8141801	SOCATARALLYE	8400125
SCHLERK8	3801567	SKRSKYS58	8141804	SOCATARALLYE	8400131
SCHLERK8	38019VL	SKRSKYS58	8141806	SOCATATB 10	8680696
SCHLERKA6	3801525	SKRSKYS58	8141808	SOCATATB20	8680695
SCHLERKA6	3801528	SKRSKYS58	8141809	SPARTN7W	8430302 8430102
SCHLERKA6	3801530	SKRSKYS58	8141811	SPARTNC2 SPARTNC3	8430206
SCHLERKA6	3801535	SKRSKYS58	8141814	SPARTNC3	8430208
SCHLERKA6	3801537	SKRSKYS58	8141815	SPARTNC3	8430210
SCHLERKA6	3801540	SKRSKYS58	8141821 8141839	SPHRTHCIRRUS	38019VC
SCHLERKA6	3801542	SKRSKYS58 SKRSKYS58T	8141803	SPHRTHCIRRUS	38019VE
SCHLERKA6	3801545 0560221	SKRSKYS58T	8141805	SPHRTHJANUS	3802002
SCHZOWMODELB	8050207	SKRSKYS58T	8141807	SPHRTHNIMBUS	3801923
SCUZERSG2 SCWZERG164	3952704	SKRSKYS58T	8141840	SPHRTHNIMBUS	3801925
SCWZERSG1	8050102	SKRSKYS58T	8141842	SPHRTHNIMBUS	3801950
SCWZERSG1	8050104	SKRSKYS58T	8141844	SPHRTHNIMBUS	38019VD
SCWZERSG1	8050106	SKRSKYS61	8141826	SPHRTHNIMBUS	38019VF
SCWZERSG1	8050108	SKRSKYS61	8142101	SPHRTHNIMBUS	38019VG
SCWZERSG1	8050110	SKRSKYS61	8142102	SPHRTHNIMBUS	38019VJ
SCWZERSG1	8050112	SKRSKYS61	8142103	SPHRTHS	3801933
SCWZERSG1	8050114	SKRSKYS61	8142104	SPHRTHS	3801939
SCWZERSG1	8050116	SKRSKYS61	8142107	SPHRTHSH1	3801945
SCWZERSG1	8050118	SKRSKYS61	814210C	SPHRTHSHK	3801920
SCWZERSG1	8050120	SKRSKYS62	8142202	SPHRTHVENTUS	3802050 3802051
SCWZERSG1	8050122	SKRSKYS64	8142604	SPHRTHVENTUS SPORT GEOPEN	3802433
SCWZERSG1	8050124	SKRSKYS70	8143000	SPTPUZRF4D	8451012
SCWZERSG1	8050146	SKRSKYS76	8143006	SPTPUZRF5	8451014
SCWZERSG1	8050147	SKRSKYS76	8143007 8143010	SPTPUZRF5	8451016
SCWZERSG1	8050148	SKRSKYS76 SLINDS100	0140202	STAR CAVALR	8480102
SCWZERSG1	8050149 8050151	SLINDS 100	0140208	STAR CAVALR	8480104
SCWZERSG1 SCWZERSG1	8050151	SLINDS 100	9550102	STAR CAVALR	8480106
SCWZERSG1	8050502	SLINDS 100	9550104	STATE F	8521004
SCWZERSG2	8050202	SLINDSB	0144306	STBROSS25	8100525
SCWZERSG2	8050206	SLINDSB	0144308	STBROSSC7	8100512
SCWZERSG2	8050210	SLINDSB	4571008	STBROSSD3	8100602
SCWZERSG2	8050602	SLNSBYKITE	8320102	STBROSSD3	8100606
SCWZERSG2	8050604	SLNSBYT45	8320304	STLOUSC2	7920304
SCWZERSG2	8050608	SLNSBYT49	8321008	STLOUSYPT 15	7920302
SCWZERSG2	8050610	SLNSBYT50	8320402	STNSON10	8632002 8632004
SCWZERSG2	8050612	SLNSBYT51	8320602	STNSON10	8632102
SCWZERSG2	8050614	SLNSBYT53	8321508	STNSON10 STNSON10	8632104
SCWZERSG2	8051404	SLNSBYT59	8321510	STNSON6000	8630904
SCWZERSG2	8051604	SMITH 600	1710602	STNSONA	8630901
SCWZERSG2	8051606	SMITH 600 SMITH 600	1710606 8360602	STNSONUR	8630402
SCWZERSGM2	8050301 8050902	SMITH 600	£360604	STNSONJR	8630404
SCWZERTG3A SEMCO 30	8070504	SMITH 600	8360605	STNSONUR	8630406
SEMCO CLNGER	8070802	SMITH 600	8360606	STNSONL 1	8630102
SEMCO MARKV	8071802	SMITH 600	8360608	STNSONL 1	8630114
SEMCO MODELT	8071701	SNIAS 350	8680801	STNSONL5	8630202
SEMCO TC4	8071408	SNIAS 350	8680802	STNSONL5	8630204
SEMCO TC4	8071409	SNIAS 350	8680803	STNSONL5	8630206
SIOUX 60	8250102	SNIAS 350	8680804	STNSONL5	8630210
SIOUX 90	8250106	SNIAS AS332	8680808	STNSONL5	8630212
SIREN C30	8270302	SNIAS AS332	8680809	STNSONL5	8630214
SKRSKYS39	8140502	SNIAS CONCRD	8690102	STNSONSM2	8630602 8630604
SKRSKYS39	8140504	SNIAS SA318	8680506	STNSONSM2	8630702
SKRSKYS51	8141102	SNIAS SA318	8680508	STNSONSM7 STNSONSM7	8630704
SKRSKYS52	8141306	SNIAS SA318	8680511 8680612	STNSONSM8	8630802
SKRSKYS52	8141308	SNIAS SA330	50000 1Z	5,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA
STNSONSR10	8631602	TCRAFKD	8850410	TOMCAT	2390302
STNSONSR 10	8631604	TCRAFKD	8850412	TRYTEK65	0190406
STNSONSR 10	8631608	TCRAFKD	8850414	TRYTEK65	0190712
STNSONSR 10	8631614	TCRAFKD	8850415	TRYTEK65	0190716
STNSONSR 10	8631616	TCRAFKD	8850416	TRYTEK65	0190920
STNSONSR 10	8631620	TCRAFKD	8850420	TRYTEK65	0190922
STNSONSR5	8631102	TCRAFT15A	8850702	TRYTEK65	0190926
STNSONSR5 STNSONSR5	8631104 8631108	TCRAFT20 TCRAFTA	8851002 8850202	TRYTEK65	0190928
STNSONSR5	8631110	TCRAFTBC	8850302	TRYTEK65 TRYTEK65	0190930 0190932
STNSONSR5	8631112	TCRAFTBC	8850304	TRYTEKCF	0190202
STNSONSR6	8631202	TCRAFTBC	8850306	TRYTEKK	0190402
STNSONSR6	8631204	TCRAFTBC	8850308	TRYTEKK	0190404
STNSONSR7	8631304	TCRAFTBC	8850310	TRYTEKKC	0190204
STNSONSR7	8631306	TCRAFTBC	8850314	UNIPRO113	9250302
STNSONSR8	8631404	TCRAFTBC	8850316	UNIPRO70	9250202
STNSONSR8	8631408	TCRAFTBC	8850318	UNIPROD145	9250502
STNSONSR8 STNSONSR8	8631412 8631416	TCRAFTBC TCRAFTBC	8850320 8850322	UNIVACGC1 UNIVACGC1	9230102 9230104
STNSONSR9	8631502	TCRAFTBC	8850323	UNIVACGC1	9230106
STNSONSR9	8631504	TCRAFTBC	8850324	UNIVACGC1	9230108
STNSONSR9	8631508	TCRAFTBC	9230916	UNIVACGC1	9230110
STNSONSR9	8631518	TCRAFTBC	9230920	UNIVACGC1	9230112
STNSONSR9	8631526	TCRAFTBC	9230928	UNIVAR108	9230402
STNSONV77	8631802	TCRAFTBF	8850326	UNIVAR108	9230404
STNSONV77	8631804	TCRAFTBF	8850332	UNIVAR108	9230406
STNSONW	8631902	TCRAFTBF	8850336	UNIVARIO8	9230408
STOLACUC1 STOLACUC1	8640202 9220102	TCRAFTBF TCRAFTBL	8850340 8850346	UNIVARIOS	9230412
STOLAMRC3	3080202	TCRAFTBL	8850350	UNIVAR108 UNIVAR108	9230414 9230416
STOLAMRC3	3080204	TCRAFTBL	8850354	UNIVAR108	9230418
STOLAMRC3	3080206	TCRAFTBL	8850356	UNIVAR415	0420104
STRMAN3	8560202	TCRAFTTC6	8850102	UNIVAR415	0420202
STRMAN3	8560208	TEAL TSC1A	8880102	UNIVAR415	0420204
STRMAN4	8560302	TEAL TSC1A	8960404	UNIVAR415	0420302
STRMAN4	8560306	TEMCO 11A	8890402	UNIVAR415	0420304
STRMAN6 SUD GY80	8560402 8681006	TEMCO 11A TEMCO T35	8890404 8890601	UNIVAR415 UNIVAR415	0420306
SUD SE210	8680206	TEMCO 135	8890602	UNIVAR415	0420308 0420310
SUPAC 14	8730402	TEMCO TT1	8890502	UNIVAR415	0420310
SUPAC 14	8730404	TH55	4471002	UNIVAR415	0420314
SUPAC LA	8730202	THUNDRAX5	05604UK	UNIVAR415	0420316
SUPAC LA	8730204	THUNDRAX5	05604UM	UNIVAR415	0420318
SUPAC LA	8730206	THUNDRAX5	05604UN	UNIVAR415	0420320
SUPAC LA	8730208	THUNDRAX5	05604UP	UNIVAR415	0420322
SUPAC V SUPAC V	8730302 8730306	THUNDRAX5 THUNDRAX6	8970100 8970102	UNIVARA15	0420324
SUPAC V	8730308	THUNDRAX6	8970104	UNIVAR415 UNIVAR415	0420326 0420328
SWALOWSWALOW	8760102	THUNDRAX7	8970105	UNIVAR415	0420330
SWALOWTP	8760202	THUNDRAX7	8970106	UNIVAR415	0420332
SWRNGNSA226	8780122	THUNDRAX7	8970107	UNIVAR415	0420334
SWRNGNSA226	8780404	THUNDRAX7	8970108	UNIVAR415	0420336
SWRNGNSA226	8780405	THUNDRAX7	8970110	UNIVAR415	0420338
SWRNGNSA226	8780406	THUNDRAX7	8970120	UNIVAR415	0420402
SWRNGNSA227 SWRNGNSA227	8780603 8780610	THUNDRAX8 THUNDRAX8	8970111 8970112	UNIVAR415	0420406
SWRNGNSA227	8780620	THUNDRAX9	8970115	UNIVAR415 UNIVAR415	0420502 0420504
SWRNGNSA26	8780102	TIMM COLEGT	8980102	UNIVAR415	0420504
SWRNGNSA26	8780112	TIMM N2T	8980202	UNIVAR415	0420702
SZD 41	8821641	TMPSONNAVION	6150104	UNIVAR415	0540102
SZD 45	8822002	TMPSONNAVION	6150112	UNIVAR415	0540104
SZD 48	8821648	TMPSONNAVION	6150114	UNIVAR415	5872014
TCRAFK21	8850906	TMPSONNAVION	6150116	UNIVAR415	5872018
TCRAFKD TCRAFKD	8850402 8850404	TMPSONNAVION TMPSONNAVION	6150120 6150122	VARGA 2150	5940202
TCRAFKD	8850408	TMPSONNAVION	6150130	VARGA 2150 VARGA 2150	5940204 9350102
i wind NW	200400	AND GOINGSTEELS	3.24.00	FRIGH 2130	3330102

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES (CONTINUED)

SDF	t	FAA	SD	R	FA _A	 SDR	FAA
VARGA 21	80 9	350104	WACO	YK	9600832		
VARGA 21				YK	9600834		
VICKER74	5 9	470204	WACO	YK	9600835		
VICKER74				YK	9600838		
VICKER74		. — .		YMF	9600412		
VICKER74				YOC	9600622		
VIKINGB				YOC	9600624		
VIKINGB VIZOLAA2				YPF	9601602 9601604		
VLGTBWSA				YPF YPF	9601606		
VOUGHTF4				YPF	9601608		
VOUGHTF4	-			YPF	9601610		
WACO 9	_		WACO	ZGC	9600609		
WACO AG	C8 9			ZGC8	9600604		
WACO AS	iO 9	601202	WESTLD	30	9650160		
WACO AT			WHITE		9670102		
				D1	9690302		
WACO BS			WNDKR		9720209		
WACO CR				M18	9810102		
WACO CS			WTHRLY		9530404		
WACO DS			WTHRLY WTHRLY		9630406 9630408		
WACO EG			WITHRLY		9630410		
WACO GO			WTHRLY		9630602		
WACO GX			WTHRLY		9630604		
WACD IN	IF 9		ZENITH		9950102		
WACO JO	9:	600802	ZLIN	526	9970206		
WACO JO		600806	ZLIN	526	9970212		
WACO JY			ZLIN	526	9970222		
WACO KN		600418					
WACO P		600302					
WACO P		600402 600408					
WACO Q		600504					
WACO Q		601210					
WACD QC		600640					
WACO QC	6 9	600642					
WACO QC	6 9	600644					
WACD QC		600646					
WACO QC		600648					
WACO R		600304					
WACO R		600422 600902					
WACO RE		600902					
WACO RE		600910					
WACO RP		600340					
		601102					
WACO U	9	600306					
WACO U	9	600404					
WACO U		600405					
WACO U		600508					
WACO U		600510					
WACO UC		600662 600664					
WACO UK		600808					
WACO UK		600810					
WACO UK		600820					
WACO UK		600822					
WACO UK		600824					
WACO UK		600826					
WACO UK		600830					
WACD UM		600410					
		601302 501304					
WACO UP		601304 600816					
WACO YK		600818					
		_ 555 .5					

APPENDIX E SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

THE FOLLOWING TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SD	R	FAA
ALLSN 250B	03003	FRNKLN6AG4	27026	LYC	R680	41545
ALLSN 250B	03012	FRNKLN6AV3		LYC	T53	41552
ALLSN 250C	03002	FRNKLN6AV3		LYC	T55	41555
ALLSN 250C	03011	FRNKLN6V4	27033	MNASC		43504
ALLSN 250C	03013	FRNKLN6V62		ONAN	B48	99999
ALLSN 501D ALLSN 501D	03004 03005	FRNKLN6V\$3 GE CF6	35 27040 30020	PIGMA	DV 1650	49001 37002
ALLSN 501D	03005	GE CF70		PORSCI		51001
AMES TRS	04501	GE CU61		PWA	JFTD12	52047
AMTRMCMCCULH	42501	GE CJ61		PWA	JT12	52042
ARSRCHTFE731	01518	GE CA80		PWA	JT 15	52060
ARSRCHTPE331	01502	GE CU80		PWA PWA	JT15	52112 52036
ARSRCHTPE331 ARSRCHTPE331	01506 01508	GE CT58		PWA	JT3C JT3D	52039
ARSRCHTPE331	01510	GE CT7	30030	PWA	JT4	52037
ARSRCHTPE331	01512	GLADENK5	37503	PWA	JT8	52044
ARSRCHTSE331	01505	GLADENR5	37504	PWA	JT8	52046
BRSDLYGIPSY	20003	GULF R670		PWA	JT8	52048
CFMINTCFM56	13802	JACOBPR755		PWA	JT8	52049
CONT 6285	17038	JACOBPR755		PWA PWA	JT8 JT9	52051 52050
CONT 975 CONT A40	17037 17001	JACOBPR755 JACOBSR755	· ·	PWA	PT6	52043
CONT A50	17001	JACOBSR915		PWA	PT6	52053
CONT A65	17003	LYC 0540		PWA	PT6T	52045
CONT A75	17005	LYC AL55		PWA	R1340	52009
CONT A80	17006	LYC LTS1		PWA	R1340	52010
CONT C125	17011	LYC 0145		PWA	R1340	52012
CONT C145	17012	LYC 0145		PWA	R1340	52016
CONT C85 CONT C90	17008 17009	LYC 0145		PWA PWA	R1690 R1830	52001 52017
CONT E 165	17013	LYC 0230		PWA	R1830	52018
CONT E185	17014	LYC 0320	_	PWA	R1830	52019
CONT E225	17015	LYC 0320	_	PWA	R1830	52020
CONT 0200	17020	LYC 0320		PWA	R2000	52021
CONT 0300	17022	LYC 0340		PWA	R2000	52023
CONT 0300	17024	LAC 0360		PWA PWA	R2800 R2800	52024 52025
CONT 0346 CONT 0360	17033 17023	LAC 0390		PWA	R2800	52025
CONT 0360	17025	LYC 0360		PWA	R4360	52027
CONT 0470	17026	LYC 0360		PWA	R985	52006
CONT 0470	17027	LYC 0360		PWA	R985	52007
CONT 0470	17028	LYC 0435		PWA	R985	52008
CONT 0470	17029	LYC 0435		PWA	T34	52055
CONT 0520 CONT 0520	17032 17035	LYC 0435		RROYC RROYC		54503 54504
CONT 0520	17040	LYC 0435		RROYC		54507
CONT 0526	17030	LYC 0435	_	RROYC		54508
CONT R670	17016	LYC 0435		RROYC	EDART	54509
CONT R670	17018	LYC 0435			EGIPSY	20005
DHAVXXGIPSY	20004	LYC 0435			EGIPSY	20006
FCD 6410	26002	LYC 0480			EGIPSY	20007 54501
FCD 6440 FRNKLN4A235	26003 27011	LYC 0480			EGRIFF	54510
FRNKLN4AC150	27002	LYC 0540			EVIPER	10201
FRNKLN4AC150	27003	LYC 0540				
FRNKLN4AC150	27004	LYC 0540	41534			
FRNKLN4AC171	27005	LYC 0540				
FRNKLN4AC176	27006	LYC 0540				
FRNKLN4AC176 FRNKLN4AC199	27007 27008	LYC 0541				
FRNKLN4AC199	27008	LYC 0720				
FRNKLN4AC199	27010	LYC R680				
FRNKLNGA4150	27024	LYC R680				
FRNKLN6A4165	27025	LYC R680				
FRNKLN6A4200	27027	LYC R680				
FRNKLN6A8215	27030	LYC R680	41544			

BIBLIOGRAPHY

- Census of U.S. Civil Aircraft, Calendar Year 1987, U.S. Department of Transportation, Federal Aviation Administration, Washington, DC: U.S. Government Printing Office, 1987.
- Code of Federal Regulations, Aeronautics and Space, Title 14, Parts 60 to 139, Office of the Federal Register, National Archives and Records Administration, Washington, DC: U.S. Government Printing Office, 1987.
- FAA Air Traffic Activity, Fiscal Year 1987, Federal Aviation Administration, Washington, DC, 1987.
- General Aviation Avionics Statistics (1980 Data), U.S. Department of Transportation, Federal Aviation Administration, Washington, DC: U.S. Government Printing Office, 1982.
- Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, Washington, DC: U.S. Government Printing Office, 1974.
- <u>United States Code Annotated, Title 49,</u> Section 1401, St. Paul, Minnesota: West Publishing Co., 1978.